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March 13, 2000

Ms. Normajean P. Eleazer
Contracting Officer's Representative
General Services Administration
Regional Office Building
7th & D. Street, Room 2080 (WPX)
Washington, D.C. 20407

RE: Skyline V Building – Microbial Sampling Survey Report

Dear Ms. Eleazer:

Under Contract GS11P99YAD0719, Delivery Order P-11-00-DC-0104, Applied Environmental, Inc. conducted microbial sampling in locations throughout the Skyline V office building, located at 5111 Leesburg Pike, Falls Church, Virginia. The survey was performed between January 31 and February 10, 2000, and consisted of air sampling to measure airborne fungi in locations throughout the building. Air sampling for non-viable fungal spores was performed in selected ninth floor locations, and wipe sampling for surface fungi was performed in several ninth floor locations and on various components of the air-handling system. Viable air sampling was performed on standard fungal media as well as on media preferred by *Stachybotrys*.

The sampling was performed by Robert Grosso, IHIT, CHMM, and Jeffrey Amy, Industrial Hygienist. Technical oversight for the project was provided by David P. O'Konski, CIH, CSP.

The survey was performed following the identification of *Stachybotrys chartarum (atra)* in samples previously collected from the ninth floor conference room and surrounding office areas. The initial sampling was prompted by extensive water damage in the ninth floor conference room.

SUMMARY

Fungal air sampling results were generally low, with concentrations ranging from "No Growth" to 42 colony forming units per cubic meter of air (cfu/m³). Indoor fungal concentrations were consistent with or below the outdoor concentrations, which were also low. *Stachybotrys chartarum* was isolated in six locations on the ninth floor. These locations included the Conference Room and Rooms 9182, 9112, 9180, 9110, 9180A, and 9201.

Stachybotrys was also isolated in Room 105 in Suite 110 of the Skyline IV building, which was sampled as a result of a specific water incursion event unrelated to the conditions on the ninth floor of Skyline V.

Other pathogenic fungi including several species of *Aspergillus* were also identified in several of the air sampling locations. These locations include the Conference Room, Rooms 9182, 9180, 9143, 638, 538-542 GME Room, 636, and locations in Suites 500 and 517. *Aspergillus niger* was also present in the sample collected outdoors.

Fungal wipe sampling results were generally low. Several pathogenic species of *Aspergillus* were isolated in samples collected on the fifth floor. Slightly elevated concentrations of fungi were measured in the air handling units (AHU) sampled (AHUs 1 and 2). These units serve the entire building. *Stachybotrys* was present in samples collected on the return air side of AHU 2. Other fungi, not normally present in indoor environments, were identified within both air handling units. The presence of these organisms indicates the need for cleaning and disinfection of these surfaces.

Active water leakage into the building was observed in isolated areas on the ninth floor during the survey.

SURVEY METHODOLOGY

Viable air sampling was performed in each office on the ninth floor of the building, and in representative locations on each other floor occupied by Government tenants. Air sampling was also performed in one location in the adjacent Skyline IV building. In addition to viable sampling, non-viable fungal spore sampling was performed in some ninth floor locations during the initial phase of the sampling. Fungal wipe sampling was performed in representative locations on each floor where air sampling was performed, and was also performed in several locations in AHUs 1 and 2.

Microbial air samples were collected using an N6 stage Andersen viable sieve impactor. Air was drawn through the impactor using a precalibrated GAST electric high-volume sampling pump at a rate of 28.3 liters per minute. Modified malt extract agar was used as a general fungal sampling medium, and Sabaraud Dextrose agar was used to sample specifically for *Stachybotrys*. Analyses of the microbial air samples were performed in accordance with standard medical/public health microbiological isolation and characterization techniques and NIOSH Method 501 (draft document). The samples were analyzed to identify the concentrations of viable bacterial and fungal organisms present in total colony forming units per cubic meter of air (cfu/m³).

The wipe samples were collected using *Culturette II* rayon-tipped sampling swabs and transport systems manufactured by Becton Dickinson Microbiology Systems. Each swab was used to wipe a known area of the surface to be sampled, and was then stored in a modified Stuart's bacterial transport medium during handling and transport to the laboratory. All samples were collected in accordance with protocols recognized by the American Conference of Governmental Industrial Hygienists (ACGIH), and were enumerated and identified using standard isolation and identification techniques. Sample results are provided as total counts of colony forming units (cfu) per square inch of surface area for the wipe sample.

Non-viable spore trap samples were collected in some ninth floor locations to determine the potential for non-viable fungal spores to contribute to allergic symptoms. Some fungal spores may be present in the air, but will not grow on culture media in the laboratory. Samples were collected using a battery-powered Burkard Personal Volumetric air sampler with an air flow rate of ten liters per minute. The sampler draws ambient air through the sampling chamber and deposits spores and other particles onto a glass slide treated with a petroleum-based adhesive. Samples were analyzed by direct microscopic examination, and were reported by genus and as a total, in spores per cubic meter of air.

Microbial samples were analyzed by Aerobiology Laboratory Associates, Inc., of Reston, Virginia.

SURVEY FINDINGS

The results of the sampling are provided in the data table included as Attachment A. Attachment B provides the laboratory data sheets. Brief descriptions of some common fungal organisms are provided for your reference as Attachment C.

General interpretation guidelines are provided below:

Microbial - General Guidelines

Microorganisms and other biological contaminants have been associated with various allergic responses including asthma attacks, hypersensitivity responses (hypersensitivity pneumonitis, humidifier fever, allergic rhinitis etc.) and illnesses such as legionellosis, Legionnaire's disease, and Pontiac Fever. Symptoms can include chills, fever, muscle aches, chest tightness, headache, cough, sore throat, diarrhea, and nausea. Sources of microbial contaminants can include air handling system condensate, cooling towers, water-damaged building materials, high indoor humidity, damp organic materials, and porous wet surfaces. The presence of moisture or water in combination with organic materials can support the growth of microorganisms. Microbial contamination within a building ventilation system is also of concern due to the potential for the system to circulate microorganisms to non-source areas (e.g., areas without water damage or reservoirs).

The ACGIH *Bioaerosols, Assessment and Control, 1999*, provides guidance on investigation, sampling, assessment, and remedial actions. This document identifies microorganisms currently associated with Building Related Illness (BRI), but does not provide any criteria for acceptable airborne concentrations or surface contamination levels. Emphasis is placed on identification of species, conditions found at the site, and symptoms reported by the affected individuals. "ACGIH does not support any existing numerical criteria for interpreting data on biological agents from source or air samples in non-manufacturing environments."

There are no federal OSHA standards regulating exposure to microorganisms in the work place. The OSHA *Technical Manual, Chapter 6 - Indoor Air Quality Investigation, issued by OSHA Instruction CPL-2-2.20B, CH-1, November 13, 1990*, provides a value of 1,000 viable cfu/m³, 1,000,000 cfu/gram of fungi in dust or material, and 10,000 cfu/milliliter of stagnant water or slime as contamination indicators.

It should be noted that levels in excess of these concentrations do not necessarily imply that the conditions are unsafe or hazardous. A determination of the types and concentrations of airborne microorganisms is necessary to fully evaluate the hazard to employees. However, as previously indicated, this level does not correlate directly with airborne levels that are of health concern because of the wide variety of microorganisms that can be found in buildings. In several cases where a large number of people have exhibited illnesses that were associated with microbial exposure, the levels of bacteria and fungi have usually been more than 2,000 cfu/m³ of air. It should be noted that during growing seasons, outdoor fungal spore levels can range from 1,000 cfu/m³ to 100,000 cfu/m³ of air.

No contamination indicator is provided for surface or wipe sampling concentrations. Wipe sampling is commonly performed to evaluate the degree of surface contamination. Although the analysis can be reported as a concentration, the result is generally considered an empirical or qualitative value. An affirmative outcome is simply an indicator that maintenance may be required to maintain surface cleanliness. There is no regulatory threshold for microbial wipe samples. Therefore, specific values should take into account sound professional judgment and recommended guidelines of research and public health institutions when evaluating the significance of the analytical results. Careful consideration should also be given when assessing the magnitude of the value, keeping in mind comparative outdoor species, contaminant dispersion, and the toxicity of the microorganism isolated.

Adverse health effects associated with exposure to microbial organisms are a function of many factors, of which concentration and the type of organism are major considerations. In most cases where the airborne concentration of viable microbes is low, adverse health consequences of exposure to bioaerosols are observed only in hypersensitive individuals, such as persons with known allergy histories, or in individuals with compromised immune systems. When present, the reactions of such individuals tend to become more severe with increasing exposure.

In assessing potential microbial exposures, it is important to note that individual microbial measurements provide a limited view of true exposure due to the fact that levels can fluctuate widely over time and under varying conditions. In addition, dead cells and cell fragments, proteins, metabolites and volatile organic compounds produced by microbes may also be responsible for adverse health effects.

Confirmation of actual health effects resulting from exposure to a microbial agent must be based on medical findings in conjunction with survey test results.

DISCUSSION AND RECOMMENDATIONS

The ninth floor air sampling results indicated several rooms where *Stachybotrys chartarum* was isolated. These rooms included the Conference Room and several rooms in the immediate vicinity. *Stachybotrys* was also isolated from the sample collected in Room 9201, which is also on the south side of the ninth floor, but is somewhat removed from the Conference Room area. Evidence of past water damage as well as active water incursion were observed during the sampling, and roof repairs were being performed simultaneously with the survey in an effort to prevent water from entering the building. Some water damaged building materials had been removed from the building, and others remained while the sampling was performed.

Aspergillus niger and *Aspergillus fumigatus* (opportunistic pathogens) were also observed in some of the samples collected from the ninth floor, sixth floor, and fifth floor, and may indicate amplification of these organisms in the locations sampled.

Wipe sampling generally indicated low surface concentrations. Samples collected within AHUs 1 and 2 were slightly elevated compared to the samples collected in other areas of the building. *Aspergillus niger* and *Stachybotrys* were isolated within AHU 2. Several of the other organisms isolated within the air handling units are not commonly isolated in indoor environments (nor in the HVAC components serving them) in the concentrations measured, and indicate the need for cleaning and disinfection of the surfaces sampled.

Based upon the sampling results and upon observations made while on-site, the following recommendations are provided:

1. The leaks in the building must be repaired to prevent future water incursion to minimize the potential for bioamplification.
2. Wet or previously wet porous materials that were not dried in a timely fashion (24 hours) should be removed and discarded. Non-porous surfaces and materials should be thoroughly cleaned and disinfected. Elevated airborne fungal concentrations may result once contaminated

Ms. Normajean P. Eleazer
March 13, 2000
Page 6

building materials are disturbed, and it is strongly recommended that an experienced microbial abatement contractor perform the remedial measures in this building.

3. Further investigation is warranted on the fifth and sixth floors due to the presence of several pathogenic species of *Aspergillus*.
4. Follow-up air and wipe sampling should be performed following remedial actions to assess their effectiveness in removing the target organisms.

Cost-effective remedial technologies are currently available through specialty contractors using proprietary anti-microbial agents. These products have been proven effective when applied properly in accordance with the manufacturers' recommendations. Additionally, some contractors will provide written warranties guaranteeing that microbial growth will not reoccur, provided that certain conditions are met and documented (e.g., no water intrusion into the space, etc.).

Consideration may be given to obtaining further information from prospective contractors regarding specific options applicable to the building and the conditions described in this report.

If you have any questions, or I may be of further assistance, please feel free to call.

Sincerely,

(b) (6)

Francis W. McGrail IV
Division Manager
Indoor Air Quality Services

Ref. No: 1046-99-0604

ATTACHMENT A

Laboratory Results Data Table



GENERAL SERVICES ADMINISTRATION

Microbial Sampling Results

Skyline V Building
5111 Leesburg Pike
Falls Church, Virginia

Sampling Location	Sample Type	Result	Organisms Isolated
JASD000131-1 Ninth floor, conference room	Air, Total Fungal Count w/ Ids	24 cfu/m ³	Rhizopus species (50%) Cladosporium species (50%)
JASD000131-1 Ninth floor, conference room	Air, Stachybotrys Culture	24 cfu/m ³	Stachybotrys chartarum (atra) (50%) Aspergillus niger (25%)
JASD000131-1 Ninth floor, conference room	Non-viable, Spore Trap Analysis	Total spores = 66	Cladosporium (11) Basidiospores (11) Unknown (44)
JASD000131-2 Ninth Floor, Room 9182	Air, Total Fungal Count w/ Ids	36 cfu/m ³	Penicillium species (50%) Aspergillus niger (17%)
JASD000131-2 Ninth Floor, Room 9182	Air, Stachybotrys Culture	30 cfu/m ³	Stachybotrys chartarum (atra) (40%) Penicillium species (40%)
JASD000131-2 Ninth Floor, Room 9182	Non-viable, Spore Trap Analysis	Total spores = 77	Ascospores (11) Smuts, Periconia, Myxomycetes (11) Unknown (44) Hyphal Elements (11)
JASD000131-3 Ninth floor, Room 9113	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASD000131-3 Ninth floor, Room 9113	Air, Stachybotrys Culture	24 cfu/m ³	Penicillium species (50%) Yeast (25%)
JASD000131-3 Ninth floor, Room 9113	Non-viable, Spore Trap Analysis	Total spores = 11	Unknown (11)
JASD000131-4 Ninth floor, Room 9112	Air, Total Fungal Count w/ Ids	18 cfu/m ³	Penicillium species (33%) Cladosporium species (33%)
JASD000131-4 Ninth floor, Room 9112	Air, Stachybotrys Culture	18 cfu/m ³	Penicillium species (67%) Cladosporium species (33%)
JASD000131-4 Ninth floor, Room 9112	Non-viable, Spore Trap Analysis	Total spores = 66	Ascospores (22) Smuts, Periconia, Myxomycetes (11) Stachybotrys (22) Epicoccum (11)
JASD000131-5 Ninth floor, office at north end of corridor from conference room	Air, Total Fungal Count w/ Ids	6 cfu/m ³	Cladosporium species (100%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASD000131-5 Ninth floor, office at north end of corridor from conference room	Air, Stachybotrys Culture	18 cfu/m ³	Yeast (67%) Cladosporium species (33%)
JASD000131-5 Ninth floor, office at north end of corridor from conference room	Non-viable, Spore Trap Analysis	Total spores = 44	Cladosporium (11) Smuts, Periconia, Myxomycetes (11) Penicillium/Aspergillus group (11) Pestalotia (11)
JASD000131-6 Outside	Air, Total Fungal Count w/ Ids	66 cfu/m ³	Cladosporium species (27%) Penicillium species (18%)
JASD000131-6 Outside	Air, Stachybotrys Culture	66 cfu/m ³	Sterilia mycelia (45%) Penicillium species (18%)
JASD000131-6 Outside	Non-viable, Spore Trap Analysis	Total spores = 330	Smuts, Periconia, Myxomycetes (22) Penicillium/Aspergillus group (11) Pollen grains (22) Unknown (253) Hyphal elements (22)
JASD000131-7 Blank	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASD000131-7 Blank	Air, Stachybotrys Culture	No Growth	N/A
JASK000201-1 Ninth floor, Room 9180	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Aspergillus niger (50%) Penicillium species (50%)
JASK000201-1 Ninth floor, Room 9180	Air, Stachybotrys culture	7 cfu/m³	Stachybotrys chartarum (atra) (100%)
JASK000201-2 Ninth floor, Room 9114	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Cladosporium species (34%) Phoma species (33%) Sterilia mycelia (33%)
JASK000201-2 Ninth floor, Room 9114	Air, Stachybotrys culture	42 cfu/m ³	Cladosporium species (33%) Drechslera species (17%) Penicillium species (17%) Phoma species (17%) Acremonium (Cephalosporium) species (16%)
JASK000201-3 Ninth floor, Room 9115	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aspergillus ochraceous (100%)
JASK000201-3 Ninth floor, Room 9115	Air, Stachybotrys culture	No Growth	N/A
JASK000201-4 Ninth floor, Room 9111	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-4 Ninth floor, Room 9111	Air, Stachybotrys culture	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000201-5 Ninth floor, Room 9116	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Penicillium species (100%)
JASK000201-5 Ninth floor, Room 9116	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (100%)
JASK000201-6 Ninth floor, Room 9110	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-6 Ninth floor, Room 9110	Air, Stachybotrys culture	7 cfu/m³	Stachybotrys chartarum (atra) (100%)
JASK000201-7 Ninth floor, Room 9117	Air, Total Fungal Count w/ Ids	35 cfu/m ³	Penicillium species (40%) Aspergillus species (20%) Scopulariopsis candidus (20%) Sterilia mycelia (20%)
JASK000201-7 Ninth floor, Room 9117	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000201-8 Ninth floor, Room 9109	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Cladosporium species (100%)
JASK000201-8 Ninth floor, Room 9109	Air, Stachybotrys culture	7 cfu/m ³	Aspergillus species (100%)
JASK000201-9 Ninth floor, Room 9118	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-9 Ninth floor, Room 9118	Air, Stachybotrys culture	No Growth	N/A
JASK000201-10 Ninth floor, Room 9117A	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-10 Ninth floor, Room 9117A	Air, Stachybotrys culture	No Growth	N/A
JASK000201-11 Ninth floor, Room 9108A	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-11 Ninth floor, Room 9108A	Air, Stachybotrys culture	14 cfu/m ³	Alternaria species (50%) Sterilia mycelia (50%)
JASK000201-12 Ninth floor, Room 9107	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aspergillus ochraceous (100%)
JASK000201-12 Ninth floor, Room 9107	Air, Stachybotrys culture	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000201-13 Ninth floor, Room 9180A	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Sterilia mycelia (66%) Aspergillus ochraceous (34%)
JASK000201-13 Ninth floor, Room 9180A	Air, Stachybotrys culture	28 cfu/m³	Stachybotrys chartarum (atra) (75%) Penicillium species (25%)
JASK000201-14 Ninth floor, Room 9179	Air, Total Fungal Count w/ Ids	35 cfu/m ³	Penicillium species (60%) Cladosporium species (40%)
JASK000201-14 Ninth floor, Room 9179	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000201-15 Ninth floor, Room 9183	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Heteroconium species (100%)
JASK000201-15 Ninth floor, Room 9183	Air, Stachybotrys culture	14 cfu/m ³	Cladosporium species (50%) Penicillium species (50%)
JASK000201-16 Ninth floor, Room 9186	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Aureobasidium species (34%) Streptomyces species (33%) Heteroconium species (33%)
JASK000201-16 Ninth floor, Room 9186	Air, Stachybotrys culture	No Growth	N/A
JASK000201-17 Ninth floor, Room 9187A	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Penicillium species (100%)
JASK000201-17 Ninth floor, Room 9187A	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000201-18 Ninth floor, Room 9178	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Cladosporium species (100%)
JASK000201-18 Ninth floor, Room 9178	Air, Stachybotrys culture	7 cfu/m ³	Streptomyces species (100%)
JASK000201-19 Ninth floor, Room 9177	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Arthrinium species (50%) Penicillium species (50%)
JASK000201-19 Ninth floor, Room 9177	Air, Stachybotrys culture	No Growth	N/A
JASK000201-20 Ninth floor, Room 9178B	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Heteroconium species (50%) Verticillium species (50%)
JASK000201-20 Ninth floor, Room 9178B	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000201-21 Ninth floor, Room 9188	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Verticillium species (34%) Sterilia mycelia (33%) Heteroconium species (33%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000201-21 Ninth floor, Room 9188	Air, Stachybotrys culture	No Growth	N/A
JASK000201-22 Ninth floor, Room 9176	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Heteroconium species (100%)
JASK000201-22 Ninth floor, Room 9176	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000201-23 Ninth floor, Room 9189	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-23 Ninth floor, Room 9189	Air, Stachybotrys culture	No Growth	N/A
JASK000201-24 Ninth floor, Room 9175	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-24 Ninth floor, Room 9175	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Aspergillus species (50%)
JASK000201-25 Ninth floor, Room 9106	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aspergillus species (100%)
JASK000201-25 Ninth floor, Room 9106	Air, Stachybotrys culture	No Growth	N/A
JASK000201-26 Ninth floor, Room 9103	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-26 Ninth floor, Room 9103	Air, Stachybotrys culture	7 cfu/m ³	Streptomyces species (100%)
JASK000201-27 Ninth floor, Room 9104	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-27 Ninth floor, Room 9104	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000201-28 Outside	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-28 Outside	Air, Stachybotrys culture	14 cfu/m ³	Cladosporium species (100%)
JASK000201-29 Ninth floor, Room 9105	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)
JASK000201-29 Ninth floor, Room 9105	Air, Stachybotrys culture	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000201-30 Ninth floor, Room 9102	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Streptomyces species (100%)
JASK000201-30 Ninth floor, Room 9102	Air, Stachybotrys culture	7 cfu/m ³	Streptomyces species (100%)
JASK000201-31 Ninth floor, Room 9190	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)
JASK000201-31 Ninth floor, Room 9190	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000201-32 Ninth floor, Room 9192	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Sterilia mycelia (50%) Heteroconium species (50%)
JASK000201-32 Ninth floor, Room 9192	Air, Stachybotrys culture	No Growth	N/A
JASK000201-33 Ninth floor, Room 9174	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Cladosporium species (100%)
JASK000201-33 Ninth floor, Room 9174	Air, Stachybotrys culture	No Growth	N/A
JASK000201-34 Ninth floor, Room 9191	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Aspergillus species (50%) Black yeast (50%)
JASK000201-34 Ninth floor, Room 9191	Air, Stachybotrys culture	No Growth	N/A
JASK000201-35 Ninth floor, Room 9193	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Heteroconium species (100%)
JASK000201-35 Ninth floor, Room 9193	Air, Stachybotrys culture	No Growth	N/A
JASK000201-36 Ninth floor, Room 9194	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-36 Ninth floor, Room 9194	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000201-37 Ninth floor, Room 9101	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-37 Ninth floor, Room 9101	Air, Stachybotrys culture	7 cfu/m ³	Alternaria species (100%)
JASK000202-1 Ninth floor, Room 9100	Air, Total Fungal Count w/ Ids	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000202-1 Ninth floor, Room 9100	Air, Stachybotrys culture	No Growth	N/A
JASK000202-2 Ninth floor, Room 9099	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-2 Ninth floor, Room 9099	Air, Stachybotrys culture	No Growth	N/A
JASK000202-3 Ninth floor, Room 9098	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-3 Ninth floor, Room 9098	Air, Stachybotrys culture	No Growth	N/A
JASK000202-4 Ninth floor, Room 9094	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-4 Ninth floor, Room 9094	Air, Stachybotrys culture	No Growth	N/A
JASK000202-5 Ninth floor, Room 9095	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-5 Ninth floor, Room 9095	Air, Stachybotrys culture	No Growth	N/A
JASK000202-6 Ninth floor, Room 9097	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-6 Ninth floor, Room 9097	Air, Stachybotrys culture	No Growth	N/A
JASK000202-7 Ninth floor, Room 9096	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Streptomyces species (100%)
JASK000202-7 Ninth floor, Room 9096	Air, Stachybotrys culture	No Growth	N/A
JASK000202-8 Ninth floor, Room 9093	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-8 Ninth floor, Room 9093	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000202-9 Ninth floor, Room 9119	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-9 Ninth floor, Room 9119	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000202-10 Ninth floor, Room 9121	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000202-10 Ninth floor, Room 9121	Air, Stachybotrys culture	14 cfu/m ³	Aspergillus species (50%) Sterilia mycelia (50%)
JASK000202-11 Ninth floor, Room 9120	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-11 Ninth floor, Room 9120	Air, Stachybotrys culture	No Growth	N/A
JASK000202-12 Ninth floor, Room 9122	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-12 Ninth floor, Room 9122	Air, Stachybotrys culture	7 cfu/m ³	Cladosporium species (100%)
JASK000202-13 Ninth floor, Room 9124	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-13 Ninth floor, Room 9124	Air, Stachybotrys culture	No Growth	N/A
JASK000202-14 Ninth floor, Room 9127	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Paecilomyces inflatus (100%)
JASK000202-14 Ninth floor, Room 9127	Air, Stachybotrys culture	No Growth	N/A
JASK000202-15 Ninth floor, Room 9128	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-15 Ninth floor, Room 9128	Air, Stachybotrys culture	No Growth	N/A
JASK000202-16 Outside	Air, Total Fungal Count w/ Ids	28 cfu/m ³	Sterilia mycelia (100%)
JASK000202-16 Outside	Air, Stachybotrys culture	21 cfu/m ³	Sterilia mycelia (34%) Cladosporium species (33%) Yeast (33%)
JASK000202-17 Ninth floor, Room 9131	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-17 Ninth floor, Room 9131	Air, Stachybotrys culture	No Growth	N/A
JASK000202-18 Ninth floor, Room 9126	Air, Total Fungal Count w/ Ids	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000202-18 Ninth floor, Room 9126	Air, Stachybotrys culture	No Growth	N/A
JASK000202-19 Ninth floor, Room 9123	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-19 Ninth floor, Room 9123	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000202-20 Ninth floor, Room 9136A	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-20 Ninth floor, Room 9136A	Air, Stachybotrys culture	No Growth	N/A
JASK000202-21 Ninth floor, Room 9130	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-21 Ninth floor, Room 9130	Air, Stachybotrys culture	No Growth	N/A
JASK000202-22 Ninth floor, Room 9195	Air, Total Fungal Count w/ Ids	Quantitation not possible.	Confluent growth of Trichoderma species noted.
JASK000202-22 Ninth floor, Room 9195	Air, Stachybotrys culture	7 cfu/m ³	Cladosporium species (100%)
JASK000202-23 Ninth floor, Room 9196	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Heteroconium species (100%)
JASK000202-23 Ninth floor, Room 9196	Air, Stachybotrys culture	7 cfu/m ³	Heteroconium species (100%)
JASK000202-24 Ninth floor, Room 9197	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-24 Ninth floor, Room 9197	Air, Stachybotrys culture	No Growth	N/A
JASK000202-25 Ninth floor, Room 9198	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Paecilomyces species (100%)
JASK000202-25 Ninth floor, Room 9198	Air, Stachybotrys culture	14 cfu/m ³	Aspergillus species (50%) Sterilia mycelia (50%)
JASK000202-26 Ninth floor, Room 9199	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-26 Ninth floor, Room 9199	Air, Stachybotrys culture	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000202-27 Ninth floor, Room 9201	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aspergillus species (100%)
JASK000202-27 Ninth floor, Room 9201	Air, Stachybotrys culture	7 cfu/m³	Stachybotrys chartarum (atra) (100%)
JASK000202-28 Ninth floor, Room 9201A	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Cladosporium species (34%) Yeast (33%) Sterilia mycelia (33%)
JASK000202-28 Ninth floor, Room 9201A	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000202-29 Ninth floor, Room 9202	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-29 Ninth floor, Room 9202	Air, Stachybotrys culture	7 cfu/m ³	Yeast (100%)
JASK000202-30 Ninth floor, Room 9203	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Cladosporium species (50%) Sterilia mycelia (50%)
JASK000202-30 Ninth floor, Room 9203	Air, Stachybotrys culture	No Growth	N/A
JASK000202-31 Ninth floor, Room 9204	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Alternaria species (50%) Aspergillus ochraceous (50%)
JASK000202-31 Ninth floor, Room 9204	Air, Stachybotrys culture	No Growth	N/A
JASK000202-32 Ninth floor, Room 9205	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-32 Ninth floor, Room 9205	Air, Stachybotrys culture	No Growth	N/A
JASK000202-33 Ninth floor, Room 9206	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Cladosporium species (34%) Aspergillus species (33%) Heteroconium species (33%)
JASK000202-33 Ninth floor, Room 9206	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000202-34 Ninth floor, Room 9207	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aureobasidium species (100%)
JASK000202-34 Ninth floor, Room 9207	Air, Stachybotrys culture	No Growth	N/A
JASK000202-35 Ninth floor, Room 9208	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000202-35 Ninth floor, Room 9208	Air, Stachybotrys culture	7 cfu/m ³	Paecilomyces species (100%)
JASK000202-36 Ninth floor, Room 9209	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-36 Ninth floor, Room 9209	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (100%)
JASK000202-37 Ninth floor, Room 9173	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-37 Ninth floor, Room 9173	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (100%)
JASK000202-38 Ninth floor, Room 9169	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000202-38 Ninth floor, Room 9169	Air, Stachybotrys culture	7 cfu/m ³	Cladosporium species (100%)
JASK000202-39 Ninth floor, Room 9170	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-39 Ninth floor, Room 9170	Air, Stachybotrys culture	No Growth	N/A
JASK000203-1 Ninth floor, Room 9129	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Chrysosporium species (100%)
JASK000203-1 Ninth floor, Room 9129	Air, Stachybotrys culture	14 cfu/m ³	Aspergillus species (50%) Sterilia mycelia (50%)
JASK000203-2 Ninth floor, Room 9132	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Chrysosporium species (100%)
JASK000203-2 Ninth floor, Room 9132	Air, Stachybotrys culture	No Growth	N/A
JASK000203-3 Ninth floor, Room 9133	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000203-3 Ninth floor, Room 9133	Air, Stachybotrys culture	14 cfu/m ³	Botrytis species (50%) Sterilia mycelia (50%)
JASK000203-4 Ninth floor, Room 9134	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Botrytis (100%)
JASK000203-4 Ninth floor, Room 9134	Air, Stachybotrys culture	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000203-5 Ninth floor, Room 9135	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-5 Ninth floor, Room 9135	Air, Stachybotrys culture	7 cfu/m ³	Paecilomyces inflatus (100%)
JASK000203-6 Ninth floor, Room 9136B	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000203-6 Ninth floor, Room 9136B	Air, Stachybotrys culture	No Growth	N/A
JASK000203-7 Ninth floor, Room 9136	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Cladosporium species (50%) Sterilia mycelia (50%)
JASK000203-7 Ninth floor, Room 9136	Air, Stachybotrys culture	15 cfu/m ³	Aspergillus species (100%)
JASK000203-8 Ninth floor, Room 9137	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Botrytis species (100%)
JASK000203-8 Ninth floor, Room 9137	Air, Stachybotrys culture	7 cfu/m ³	Cladosporium species (100%)
JASK000203-9 Ninth floor, Room 9136C	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Aspergillus species (66%) Sterilia mycelia (34%)
JASK000203-9 Ninth floor, Room 9136C	Air, Stachybotrys culture	21 cfu/m ³	Aspergillus species (34%) Paecilomyces inflatus (33%) Sterilia mycelia (33%)
JASK000203-10 Ninth floor, Room 9138	Air, Total Fungal Count w/ Ids	42 cfu/m ³	Penicillium species (67%) Aspergillus species (17%) Paecilomyces species (16%)
JASK000203-10 Ninth floor, Room 9138	Air, Stachybotrys culture	No Growth	N/A
JASK000203-11 Ninth floor, Room 9139	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-11 Ninth floor, Room 9139	Air, Stachybotrys culture	No Growth	N/A
JASK000203-12 Ninth floor, Room 9140	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Penicillium species (66%) Paecilomyces species (34%)
JASK000203-12 Ninth floor, Room 9140	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (100%)
JASK000203-13 Ninth floor, Room 9141	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Penicillium species (50%) Aspergillus species (50%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000203-13 Ninth floor, Room 9141	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Streptomyces species (50%)
JASK000203-14 Ninth floor, Room 9142	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Aspergillus species (50%) Sterilia mycelia (50%)
JASK000203-14 Ninth floor, Room 9142	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000203-15 Ninth floor, Room 9143	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Cladosporium species (34%) Aspergillus niger (33%) Penicillium species (33%)
JASK000203-15 Ninth floor, Room 9143	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Aspergillus species (50%)
JASK000203-16 Ninth floor, Room 9144	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Penicillium species (100%)
JASK000203-16 Ninth floor, Room 9144	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Cladosporium species (50%)
JASK000203-17 Ninth floor, Room 9145	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)
JASK000203-17 Ninth floor, Room 9145	Air, Stachybotrys culture	7 cfu/m ³	Paccilomyces species (100%)
JASK000203-18 Ninth floor, Room 9147	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000203-18 Ninth floor, Room 9147	Air, Stachybotrys culture	No Growth	N/A
JASK000203-19 Ninth floor, Room 9167	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-19 Ninth floor, Room 9167	Air, Stachybotrys culture	1 cfu/m ³	Sterilia mycelia (100%)
JASK000203-20 Ninth floor, Room 9171	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-20 Ninth floor, Room 9171	Air, Stachybotrys culture	No Growth	N/A
JASK000203-21 Ninth floor, Room 9172	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)
JASK000203-21 Ninth floor, Room 9172	Air, Stachybotrys culture	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000203-22 Ninth floor, Room 9158	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Heteroconium species (100%)
JASK000203-22 Ninth floor, Room 9158	Air, Stachybotrys culture	No Growth	N/A
JASK000203-23 Ninth floor, Room 9165	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-23 Ninth floor, Room 9165	Air, Stachybotrys culture	No Growth	N/A
JASK000203-24 Ninth floor, Room 9157	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-24 Ninth floor, Room 9157	Air, Stachybotrys culture	1 cfu/m ³	Sterilia mycelia (100%)
JASK000203-25 Ninth floor, Room 9164	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Botrytis species (100%)
JASK000203-25 Ninth floor, Room 9164	Air, Stachybotrys culture	No Growth	N/A
JASK000203-26 Ninth floor, Room 9163	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-26 Ninth floor, Room 9163	Air, Stachybotrys culture	No Growth	N/A
JASK000203-27 Ninth floor, Room 9162	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-27 Ninth floor, Room 9162	Air, Stachybotrys culture	No Growth	N/A
JASK000203-28 Ninth floor, Room 9156	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-28 Ninth floor, Room 9156	Air, Stachybotrys culture	No Growth	N/A
JASK000203-29 Outside air, roof	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Aspergillus species (100%)
JASK000203-29 Outside air, roof	Air, Stachybotrys culture	91 cfu/m ³	Penicillium species (38%) Aspergillus species (31%) Phoma species (8%) Paecilomyces species (8%) Cladosporium species (8%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000203-30 Ninth floor, Room 9152	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Heteroconium species (100%)
JASK000203-30 Ninth floor, Room 9152	Air, Stachybotrys culture	35 cfu/m ³	Penicillium species (100%)
JASK000203-31 Ninth floor, Room 9154	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Cladosporium species (100%)
JASK000203-31 Ninth floor, Room 9154	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Alternaria species (50%)
JASK000203-32 Ninth floor, Room 9151	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Penicillium species (67%) Paecilomyces species (33%)
JASK000203-32 Ninth floor, Room 9151	Air, Stachybotrys culture	7 cfu/m ³	Aspergillus species (100%)
JASK000203-33 Ninth floor, Room 9150	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Penicillium species (67%) Sterilia mycelia (33%)
JASK000203-33 Ninth floor, Room 9150	Air, Stachybotrys culture	14 cfu/m ³	Sterilia mycelia (100%)
JASK000203-34 Ninth floor, Room 9148	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Streptomyces species (67%) Sterilia mycelia (33%)
JASK000203-34 Ninth floor, Room 9148	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000203-35 Ninth floor, Room 9149	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Sterilia mycelia (100%)
JASK000203-35 Ninth floor, Room 9149	Air, Stachybotrys culture	No Growth	N/A
JASK000203-36 Ninth floor, Room 9146	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)
JASK000203-36 Ninth floor, Room 9146	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000203-37 Ninth floor, Room 9173, beneath wallpaper, west window	Wipe, Total Fungal Count w/ Ids	20 cfu/in ²	Penicillium species (100%)
JASK000203-37 Ninth floor, Room 9173, beneath wallpaper, west window	Wipe, Stachybotrys Culture and Total Fungal Count	20 cfu/in ²	Heteroconium species (100%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000203-38 Ninth floor, Room 9173, on concrete floor, beneath carpet	Wipe, Total Fungal Count w/ Ids	40 cfu/in ²	Penicillium species (67%) Paecilomyces species (33%)
JASK000203-38 Ninth floor, Room 9173, on concrete floor, beneath carpet	Wipe, Stachybotrys Culture and Total Fungal Count	10 cfu/in ²	Penicillium species (100%)
JASK000204-1 Sixth floor, Suite 602, entrance to Mr. Riethey's office	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Penicillium species (34%) Chrysosporium species (33%) Sterilia mycelia (33%)
JASK000204-1 Sixth floor, Suite 602, entrance to Mr. Riethey's office	Air, Stachybotrys culture	No Growth	N/A
JASK000204-2 Sixth floor, Suite 601, open area near Waiter's Club	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aspergillus niger (100%)
JASK000204-2 Sixth floor, Suite 601, open area near Waiter's Club	Air, Stachybotrys Culture	21 cfu/m ³	Penicillium species (34%) Chrysosporium species (33%) Sterilia mycelia (33%)
JASK000204-3 Sixth floor, Suite 601, Y. Askew's cubicle	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000204-3 Sixth floor, Suite 601, Y. Askew's cubicle	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000204-4 Fourth floor, Suite 403, E. Forbes' office	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Chrysosporium species (100%)
JASK000204-4 Fourth floor, Suite 403, E. Forbes' office	Air, Stachybotrys Culture	21 cfu/m ³	Sterilia mycelia (100%)
JASK000204-5 Fourth floor, Suite 401, hall at Pepsi machine	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)
JASK000204-5 Fourth floor, Suite 401, hall at Pepsi machine	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-6 Eighth floor, Suite 810, reception area of L. DeLoach	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000204-6 Eighth floor, Suite 810, reception area of L. DeLoach	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-7 Eighth floor, Suite 810, Room 8008	Air, Total Fungal Count w/ Ids	28 cfu/m ³	Penicillium species (50%) Chrysosporium species (50%)
JASK000204-7 Eighth floor, Suite 810, Room 8008	Air, Stachybotrys Culture	7 cfu/m ³	Sterilia mycelia (100%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000204-8 Eighth floor, Suite 808, reception area at E. Hemsath's office	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Black yeast (100%)
JASK000204-8 Eighth floor, Suite 808, reception area at E. Hemsath's office	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-13 Ninth floor, Room 9053	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000204-13 Ninth floor, Room 9053	Air, Stachybotrys Culture	7 cfu/m ³	Penicillium species (100%)
JASK000204-14 Ninth floor, Room 9161	Air, Total Fungal Count w/ Ids	28 cfu/m ³	Penicillium species (50%) Chaetomium species (25%) Black yeast (10%)
JASK000204-14 Ninth floor, Room 9161	Air, Stachybotrys Culture	70 cfu/m ³	Penicillium species (70%) Paecilomyces species (20%) Sterilia myelia (10%)
JASK000204-15 First floor, Suite 103 (BC2A Program Office), Room 150	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Penicillium species (100%)
JASK000204-15 First floor, Suite 103 (BC2A Program Office), Room 150	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-16 First floor, Suite 105 (DISA Counter Drug Office)	Air, Total Fungal Count w/ Ids	150 cfu/m ³	Penicillium species (95%) Cladosporium species (5%)
JASK000204-16 First floor, Suite 105 (DISA Counter Drug Office)	Air, Stachybotrys Culture	98 cfu/m ³	Penicillium species (79%) Cladosporium species (7%) Rhodotorula species (7%) Yeast (7%)
JASK000204-17 First floor, Suite 107 (SSO), open area, center	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000204-17 First floor, Suite 107 (SSO), open area, center	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-18 First floor, Suite 100 (Security), Room 107	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000204-18 First floor, Suite 100 (Security), Room 107	Air, Stachybotrys Culture	7 cfu/m ³	Alternaria species (100%)
JASK000204-19 Sixth floor, Suite 602, Mr. Cole's desk	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Cladosporium species (100%)
JASK000204-19 Sixth floor, Suite 602, Mr. Cole's desk	Air, Stachybotrys Culture	14 cfu/m ³	Sterilia mycelia (50%) Alternaria species (50%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000204-20 Fourth floor, Suite 400, M. Brayleih's cubicle	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000204-20 Fourth floor, Suite 400, M. Brayleih's cubicle	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (50%) Alternaria species (50%)
JASK000204-21 Fourth floor, Suite 400, M. Maloney's office	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000204-21 Fourth floor, Suite 400, M. Maloney's office	Air, Stachybotrys Culture	7 cfu/m ³	Sterilia mycelia (100%)
JASL000204-22 Fourth floor, Suite 404, Room 470, rear	Air, Stachybotrys Culture	No Growth	N/A
JASL000204-22 Fourth floor, Suite 404, Room 470, rear	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000204-23 Outside air, roof	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-23 Outside air, roof	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000209-01 Sixth floor, Suite 624, Room 635	Air, Stachybotrys Culture	110 cfu/m ³	Penicillium species (100%)
JASK000209-01 Sixth floor, Suite 624, Room 635	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000209-02 Sixth floor, Suite 624, reception area, Room 650	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000209-02 Sixth floor, Suite 624, reception area, Room 650	Air, Stachybotrys Culture	21 cfu/m ³	Penicillium species (67%) Cladosporium species (33%)
JASK000209-03 Sixth floor, Suite 638-640, Room 638, reception	Air, Total Fungal Count w/ Ids	49 cfu/m ³	Aspergillus fumigatus (72%) Penicillium species (14%) Cladosporium species (14%)
JASK000209-03 Sixth floor, Suite 638-640, Room 638, reception	Air, Stachybotrys Culture	42 cfu/m ³	Aspergillus fumigatus (67%) Cladosporium species (33%)
JASK000209-04 Fifth floor, Suite 538-542, Sam Brown's office, Room 539	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Aspergillus species (67%) Penicillium species (33%)
JASK000209-04 Fifth floor, Suite 538-542, Sam Brown's office, Room 539	Air, Stachybotrys Culture	28 cfu/m ³	Aspergillus species (75%) Cladosporium species (25%)
JASK000209-05 Fifth floor, Suite 538-542, GME room	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Penicillium species (50%) Paecilomyces species (25%) Aspergillus fumigatus (25%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000209-05 Fifth floor, Suite 538-542, GME room	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (50%) Aspergillus fumigatus (50%)
JASK000209-06 Sixth floor, Suite 638-640, Room 636	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Aspergillus fumigatus (50%) Sterilia mycelia (50%)
JASK000209-06 Sixth floor, Suite 638-640, Room 636	Air, Stachybotrys Culture	14 cfu/m ³	Aspergillus fumigatus (50%) Cladosporium species (50%)
JASK00209-07 Skyline IV, first floor, Suite 110, Room 105, Karen Brown's office	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK00209-07 Skyline IV, first floor, Suite 110, Room 105, Karen Brown's office	Air, Stachybotrys Culture	7 cfu/m³	Stachybotrys chartarum (atra) (100%)
JASK000209-13 Fifth floor, Randall Koran's office, Suite 550-559	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Penicillium species (67%) Sterilia mycelia (33%)
JASK000209-13 Fifth floor, Randall Koran's office, Suite 550-559	Air, Stachybotrys Culture	42 cfu/m ³	Penicillium species (66%) Cladosporium species (17%) Sterilia mycelia (17%)
JASK000209-14 Fifth floor, Sherrell Kern's cubicle, Suite 550-559	Air, Total Fungal Count w/ Ids	Unable to quantitate due to nature of mucoraceous organism.	Penicillium species Rhizopus species
JASK000209-14 Fifth floor, Sherrell Kern's cubicle, Suite 550-559	Air, Stachybotrys Culture	Unable to quantitate due to nature of mucoraceous organism.	Penicillium species (75%) Rhizopus species (25%)
JASK000209-15 Fifth floor, Lt. Colonel Teresa Somnese, Suite 550-559	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000209-15 Fifth floor, Lt. Colonel Teresa Somnese, Suite 550-559	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000209-16 Fifth floor, Suite 517, Sonya Mercurius	Air, Total Fungal Count w/ Ids	98 cfu/m ³	Aspergillus fumigatus (79%) Penicillium species (7%) Pithomyces species (7%) Sterilia mycelia (7%)
JASK000209-16 Fifth floor, Suite 517, Sonya Mercurius	Air, Stachybotrys Culture	14 cfu/m ³	Aspergillus fumigatus (50%) Alternaria species (50%)
JASK000209-17 Fifth floor, Suite 517, Mark McKenzie	Air, Total Fungal Count w/ Ids	42 cfu/m ³	Penicillium species (34%) Aspergillus fumigatus (33%) Sterilia mycelia (33%)
JASK000209-17 Fifth floor, Suite 517, Mark McKenzie	Air, Stachybotrys Culture	28 cfu/m ³	Aspergillus fumigatus (75%) Penicillium species (25%)
JASK000209-18 Fifth floor, Suite 500, M. Graves' cubicle	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aspergillus fumigatus (100%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000209-18 Fifth floor, Suite 500, M. Graves' cubicle	Air, Stachybotrys Culture	7 cfu/m ³	Aspergillus species (100%)
JASK000209-19 Fifth floor, Suite 500, cubicle area, Ms. Harrington	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Alternaria species (100%)
JASK000209-19 Fifth floor, Suite 500, cubicle area, Ms. Harrington	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (100%)
JASK000209-20 Outside air, roof	Air, Total Fungal Count w/ Ids	77 cfu/m ³	Penicillium species (45%) Sterilia mycelia (36%) Cladosporium species (11%)
JASK000209-20 Outside air, roof	Air, Stachybotrys Culture	35 cfu/m ³	Cladosporium species (40%) Aspergillus niger (20%) Alternaria species (20%) Penicillium species (20%)
JASK000210-01 Sixth floor, Suite 638-640, north, AHU1, Room 638, reception, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-01 Sixth floor, Suite 638-640, north, AHU1, Room 638, reception, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-02 Sixth floor, Suite 624, north, AHU1, reception, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-02 Sixth floor, Suite 624, north, AHU1, reception, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-03 Sixth floor, Suite 602, south, AHU2, entrance to Mr. Richey's office, supply louver	Wipe, Total Fungal Count w/ Ids	10 cfu/in ²	Sterilia mycelia (100%)
JASK000210-03 Sixth floor, Suite 602, south, AHU2, entrance to Mr. Richey's office, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-04 Sixth floor, Suite 601, south, AHU2, Y. Askew's cubicle, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-04 Sixth floor, Suite 601, south, AHU2, Y. Askew's cubicle, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-05 Fourth floor, Suite 400, south, AHU2, J. Thomas, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-05 Fourth floor, Suite 400, south, AHU2, J. Thomas, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000210-06 Fourth floor, Suite 403, north, AHU1, E. Forbes, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-06 Fourth floor, Suite 403, north, AHU1, E. Forbes, supply louver	Wipe, Stachybotrys Culture	No Growth	N/A
JASK000210-07 Fourth floor, Suite 401, north, AHU1, in hall 36' east of Pepsi machine, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-07 Fourth floor, Suite 401, north, AHU1, in hall 36' east of Pepsi machine, supply louver	Wipe, Stachybotrys Culture	No Growth	N/A
JASK000210-08 Fourth floor, Suite 404, north, AHU1, Cubicle 402C, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-08 Fourth floor, Suite 404, north, AHU1, Cubicle 402C, supply louver	Wipe, Stachybotrys Culture	No Growth	N/A
JASK000210-09 Eighth floor, Suite 808, south, AHU2, receptionist area for Keegan, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-09 Eighth floor, Suite 808, south, AHU2, receptionist area for Keegan, supply louver	Wipe, Stachybotrys Culture	No Growth	N/A
JASK000210-10 Eighth floor, Suite 810, south, AHU2, receptionist for DeLoach, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-10 Eighth floor, Suite 810, south, AHU2, receptionist for DeLoach, supply louver	Wipe, Stachybotrys Culture	No Growth	N/A
JASK000210-11 Fifth floor, Suite 500-559, north, AHU1, receptionist for Matthew, supply louver	Wipe, Total Fungal Count w/ Ids	20 cfu/in ²	Rhizopus species (50%) Aspergillus niger (50%)
JASK000210-11 Fifth floor, Suite 500-559, north, AHU1, receptionist for Matthew, supply louver	Wipe, Stachybotrys Culture	No growth	N/A
JASK000210-12 Fifth floor, Suite 517, north, AHU1, Mercurius' office, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-12 Fifth floor, Suite 517, north, AHU1, Mercurius' office, supply louver	Wipe, Stachybotrys Culture	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000210-13 Fifth floor, Suite 500, south, AHU2, Szymanski's office, supply louver	Wipe, Total Fungal Count w/ Ids	150 cfu/in ²	Aspergillus species (66%) Aspergillus niger (34%)
JASK000210-13 Fifth floor, Suite 500, south, AHU2, Szymanski's office, supply louver	Wipe, Stachybotrys Culture & Total	100 cfu/in ²	Aspergillus species (100%)
JASK000210-14 Fifth floor, Suite 537-544, north, AHU1, Room 599, supply louver	Wipe, Total Fungal Count w/ Ids	30 cfu/in ²	Cladosporium species (66%) Aspergillus species (34%)
JASK000210-14 Fifth floor, Suite 537-544, north, AHU1, Room 599, supply louver	Wipe, Stachybotrys Culture & Total	30 cfu/in ²	Cladosporium species (66%) Aspergillus species (34%)
JASK000210-15 Ninth floor, Room 9182, south, AHU2, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-15 Ninth floor, Room 9182, south, AHU2, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-16 Ninth floor, conference room, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-16 Ninth floor, conference room, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-17 Ninth floor, Room 9113, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-17 Ninth floor, Room 9113, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-18 Ninth floor, Room 9112, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-18 Ninth floor, Room 9112, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-19 Ninth floor, Room 9116, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	40 cfu/in ²	Penicillium species (75%) Sterilia mycelia (25%)
JASK000210-19 Ninth floor, Room 9116, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	30 cfu/in ²	Penicillium species (100%)
JASK000210-20 Ninth floor, Room 9101, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-20 Ninth floor, Room 9101, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000210-21 Ninth floor, Room 9121, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-21 Ninth floor, Room 9121, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-22 Ninth floor, Room 9128, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-22 Ninth floor, Room 9128, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-23 Ninth floor, Room 9137, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-23 Ninth floor, Room 9137, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-24 Ninth floor, Room 9150, south, AHU2, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-24 Ninth floor, Room 9150, south, AHU2, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-25 Ninth floor, Room 9163, south, AHU2, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-25 Ninth floor, Room 9163, south, AHU2, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-26 Ninth floor, Room 9158, south, AHU2, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-26 Ninth floor, Room 9158, south, AHU2, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-27 Ninth floor, Room 9198, south, AHU2, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-27 Ninth floor, Room 9198, south, AHU2, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-28 Ninth floor, Room 9187A, south, AHU2, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-28 Ninth floor, Room 9187A, south, AHU2, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-29 First floor, Suite 107, south, AHU2, rear room supply louver	Wipe, Total Fungal Count w/ Ids	10 cfu/in ²	Sterilia mycelia (100%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000210-29 First floor, Suite 107, south, AHU2, rear room supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-30 AHU1, filter side of coil, supply air system	Wipe, Total Fungal Count w/ Ids	100 cfu/in ²	Rhodotorula species (40%) Streptomyces species (30%) Sterilia mycelia (20%) Aureobasidium species (10%)
JASK000210-30 AHU1, filter side of coil, supply air system	Wipe, Stachybotrys Culture & Total	130 cfu/in ²	Streptomyces species (69%) Sterilia mycelia (15%) Penicillium species (8%) Cladosporium species (8%)
JASK000210-31 AHU1, fan side of coil, supply air system	Wipe, Total Fungal Count w/ Ids	5400 cfu/in ²	Rhodotorula species (87%) Yeast (8%) Cladosporium species (1%) Penicillium species (1%) Pithomyces species (1%)
JASK000210-31 AHU1, fan side of coil, supply air system	Wipe, Stachybotrys Culture & Total	6100 cfu/in ²	Rhodotorula species (90%) Yeast (3%) Penicillium species (1%) Cladosporium species (1%) Sterilia mycelia (1%)
JASK000210-32 AHU1, axial vane, return air system	Wipe, Total Fungal Count w/ Ids	80 cfu/in ²	Chaetomium species (38%) Aspergillus species (25%) Penicillium species (12%) Epicoccum species (12%) Cladosporium species (12%)
JASK000210-32 AHU1, axial vane, return air system	Wipe, Stachybotrys Culture & Total	80 cfu/in ²	Aspergillus species (63%) Chaetomium species (27%)
JASK000210-33 AHU1, axial vane, return air system	Wipe, Total Fungal Count w/ Ids	70 cfu/in ²	Chaetomium species (86%) Aspergillus niger (14%)
JASK000210-33 AHU1, axial vane, return air system	Wipe, Stachybotrys Culture & Total	60 cfu/in ²	Chaetomium species (66%) Cladosporium species (17%) Rhizopus species (17%)
JASK000210-34 AHU2, filter side of coil, supply air system	Wipe, Total Fungal Count w/ Ids	60 cfu/in ²	Alternaria species (34%) Yeast (17%) Black yeast (17%) Cladosporium species (16%) Sterilia mycelia (16%)
JASK000210-34 AHU2, filter side of coil, supply air system	Wipe, Stachybotrys Culture & Total	90 cfu/in ²	Sterilia mycelia (56%) Alternaria species (11%) Yeast (11%) Cladosporium species (11%) Penicillium species (11%)
JASK000210-35 AHU2, fan side of coil, supply air system	Wipe, Total Fungal Count w/ Ids	6900 cfu/in ²	Streptomyces species (56%) Rhodotorula species (40%) Cladosporium species (1%) Sterilia mycelia (1%)
JASK000210-35 AHU2, fan side of coil, supply air system	Wipe, Stachybotrys Culture & Total	3800 cfu/in ²	Streptomyces species (51%) Rhodotorula species (43%) Cladosporium species (1%) Epicoccum species (1%)
JASK000210-36 AHU2, shaft side, axial vane, return air system	Wipe, Total Fungal Count w/ Ids	30 cfu/in ²	Penicillium species (34%) Aspergillus species (33%) Streptomyces species (33%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000210-36 AHU2, shaft side, axial vane, return air system	Wipe, Stachybotrys Culture & Total	10 cfu/in ²	Stachybotrys chartarum (atra) (100%)
JASK000210-37 AHU2, motor side axial vane, return air system	Wipe, Total Fungal Count w/ lds	150 cfu/in ²	Penicillium species (60%) Aspergillus species (7%) Rhizopus species (7%) Aspergillus niger (7%) Chaetomium species (7%)
JASK000210-37 AHU2, motor side axial vane, return air system	Wipe, Stachybotrys Culture & Total	190 cfu/in ²	Penicillium species (42%) Aspergillus niger (21%) Cladosporium species (16%) Stachybotrys chartarum (atra) (5%) Chaetomium species (5%)

ATTACHMENT B
Laboratory Data Sheets

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191
Attn:
Project: 1046-00-0043

Date Received: 1/31/00
Date Reported: 2/7/00
Page 1 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number:	JASD000131-1	Lab Sample Number:	20 0091-01
Sampling Location:	9th Floor, Conference Room		
Date Collected:	1/31/00	Volume/Area:	169.8 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 24 cfu/m³

FUNGUS Isolated:	Rhizopus species	50%
	Cladosporium species	50%

Date Analyzed: 2/8/00

Total FUNGAL Count: 24 cfu/m³

FUNGUS Isolated:	Stachybotrys chartarum (atra)	50%
	Aspergillus niger	25%

Detection Limits: 6 cfu/m³

Date Analyzed: 2/7/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 1/31/00
Date Reported: 2/7/00
Page 2 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-2 Lab Sample Number: 20 0091-02
Sampling Location: 9th Floor, Room 9182
Date Collected: 1/31/00 Volume/Area: 169.8 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 36 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Aspergillus niger 17%

Date Analyzed: 2/7/00

Total FUNGAL Count: 30 cfu/m³

FUNGUS Isolated: Stachybotrys chartarum (atra) 40%
Penicillium species 40%

Detection Limits: 6 cfu/m³

Date Analyzed: 2/7/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: JASD000131-3 Lab Sample Number: 20 0091-03
Sampling Location: 9th Floor, Room 9113
Date Collected: 1/31/00 Volume/Area: 169.8 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/7/00

Total FUNGAL Count: 24 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Yeast 25%

Detection Limits: 6 cfu/m³

Date Analyzed: 2/7/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 1/31/00
Date Reported: 2/7/00
Page 3 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number:	JASD000131-4	Lab Sample Number:	20 0091-04
Sampling Location:	9th Floor, Room 9112		
Date Collected:	1/31/00	Volume/Area:	169.8 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 18 cfu/m³

FUNGUS Isolated:	Penicillium species	33%
	Cladosporium species	33%

Date Analyzed: 2/8/00

Total FUNGAL Count: 18 cfu/m³

FUNGUS Isolated:	Penicillium species	67%
	Cladosporium species	33%

Detection Limits: 6 cfu/m³

Date Analyzed: 2/7/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Project: 1046-00-0043

Date Received: 1/31/00

Date Reported: 2/7/00

Page 4 of 11

Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-5 Lab Sample Number: 20 0091-05

Sampling Location: 9th Fl, Office at N End of Corridor from Conf Rm

Date Collected: 1/31/00 Volume/Area: 169.8 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 6 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Date Analyzed: 2/7/00

Total FUNGAL Count: 18 cfu/m³

FUNGUS Isolated: Yeast 67%

Cladosporium species 33%

Detection Limits: 6 cfu/m³

Date Analyzed: 2/7/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Project: 1046-00-0043

Date Received: 1/31/00
Date Reported: 2/7/00
Page 5 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number:	JASD000131-6	Lab Sample Number:	20 0091-06
Sampling Location:	Outside		
Date Collected:	1/31/00	Volume/Area:	169.8 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 66 cfu/m³

FUNGUS Isolated:	Cladosporium species	27%
	Penicillium species	18%

Date Analyzed: 2/7/00

Total FUNGAL Count: 66 cfu/m³

FUNGUS Isolated:	Sterilia mycelia	45%
	Penicillium species	18%

Detection Limits: 6 cfu/m³

Date Analyzed: 2/7/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number:	JASD000131-7	Lab Sample Number:	20 0091-07
Sampling Location:	Blank		
Date Collected:	1/31/00	Volume/Area:	0 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Detection Limits: N/A

Date Analyzed: 2/7/00

Total FUNGAL Count: No Growth.

Detection Limits: N/A

Date Analyzed: 2/7/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Attn:
Project: 1046-00-0043

Date Received: 1/31/00
Date Reported: 2/7/00
Page 6 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-1 Lab Sample Number: 20 0091-08
Sampling Location: 9th Floor, Conference Room
Date Collected: 1/31/00 Volume/Area: 90 L

TEST REQUESTED: 1054 NON-VIABLE, Spore Trap Analysis

<u>SPORE IDENTIFICATION</u>	<u>RESULTS</u>	<u>UNITS</u>
Ascomycetes	1	Spores/m ³
Ascomycetes		Spores/m ³
Basidiomycetes	11	Spores/m ³
Smuts, Periconia, Myxomycetes		Spores/m ³
Basidiomycetes		Spores/m ³
Rusts		Spores/m ³
Basidiomycetes (Aspergillus group)		Spores/m ³
Alternaria		Spores/m ³
Aspergillus		Spores/m ³
Chaetomium		Spores/m ³
Basidiomycetes (Mucor group)		Spores/m ³
Colorless		Spores/m ³
Aspergillus		Spores/m ³
Fusarium		Spores/m ³
Basidiomycetes		Spores/m ³
Curvularia		Spores/m ³
Basidiomycetes		Spores/m ³
Pollen grains		Spores/m ³
Basidiomycetes	44	Spores/m ³
Epicoccum		Spores/m ³
Fungal Elements		Spores/m ³
Oidium		Spores/m ³
Basidiomycetes		Spores/m ³

TOTAL SPORES: 66 Spores/m³

Detection Limits: 11 Spores/m³

Notes: Spore count may be underestimated due to heavy particulate.

Date Analyzed: 2/3/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Certificate of Laboratory Analysis

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Reston, VA 20191
Attn:
Project: 1046-00-0043

Date Received: 1/31/00
Date Reported: 2/7/00
Page 7 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-2 Lab Sample Number: 20 0091-09
Sampling Location: 9th Floor, Room 9182
Date Collected: 1/31/00 Volume/Area: 90 L

TEST REQUESTED: 1054 NON-VIABLE, Spore Trap Analysis

<u>SPORE IDENTIFICATION</u>	<u>RESULTS</u>	<u>UNITS</u>
Cladosporium		Spores/m ³
Basidiospores		Spores/m ³
Peronospora		Spores/m ³
Penicillium/Aspergillus group		Spores/m ³
Aureobasidium		Spores/m ³
Drechslera / Bipolaris group		Spores/m ³
Arthrrium		Spores/m ³
Botrytis		Spores/m ³
Stachybotrys		Spores/m ³
Unknown	44	Spores/m ³
Hyphal Elements	11	Spores/m ³
Torula herbarum		Spores/m ³
TOTAL SPORES:	<u>77</u>	<u>Spores/m³</u>

Detection Limits: 11 Spores/m³

Notes: Moderate amount of fibers and particulate observed.

Date Analyzed: 2/3/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Certificate of Laboratory Analysis

Applied Environmental, Inc.
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Reston, VA 20191
Attn:
Project: 1046-00-0043

Date Received: 1/31/00
Date Reported: 2/7/00
Page 8 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-3 Lab Sample Number: 20 0091-10
Sampling Location: 9th Floor, Room 9113
Date Collected: 1/31/00 Volume/Area: 90 L

TEST REQUESTED: 1054 NON-VIABLE, Spore Trap Analysis

<u>SPORE IDENTIFICATION</u>	<u>RESULTS</u>	<u>UNITS</u>
Chytridiomycetes		Spores/m ³
Ascomycetes		Spores/m ³
Basidiomycetes		Spores/m ³
Smuts, Periconia, Myxomycetes		Spores/m ³
Phycomycetes		Spores/m ³
Rusts		Spores/m ³
Penicillium/Aspergillus group		Spores/m ³
Alternaria		Spores/m ³
Aureobasidium		Spores/m ³
Chaetomium		Spores/m ³
Dothidea/Mucorales group		Spores/m ³
Colorless		Spores/m ³
Anthrax		Spores/m ³
Fusarium		Spores/m ³
Botrytis		Spores/m ³
Curvularia		Spores/m ³
Stachybotrys		Spores/m ³
Pollen grains		Spores/m ³
Unknown		Spores/m ³
Epicoecum		Spores/m ³
Fungal fragments		Spores/m ³
Oidium		Spores/m ³
Toxula harzianum		Spores/m ³

TOTAL SPORES: 11 Spores/m³

Detection Limits: 11 Spores/m³

Date Analyzed: 2/3/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Certificate of Laboratory Analysis

Applied Environmental, Inc.
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Reston, VA 20191

Date Received: 1/31/00

Date Reported: 2/7/00

Page 9 of 11

Attn:

Job ID: 20 0091

Project: 1046-00-0043

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-4

Lab Sample Number: 20 0091-11

Sampling Location: 9th Floor, Room 9112

Date Collected: 1/31/00

Volume/Area: 90 L

TEST REQUESTED: 1054 NON-VIABLE, Spore Trap Analysis

SPORE IDENTIFICATION

RESULTS

UNITS

Cladosporium		Spores/m ³
Basidiospores		Spores/m ³
Peronospora		Spores/m ³
Penicillium/Aspergillus group		Spores/m ³
Aureobasidium		Spores/m ³
Drechslera / Bipolaris group		Spores/m ³
Arthrrium		Spores/m ³
Botrytis		Spores/m ³
Stachybotrys	22	Spores/m ³
Unknown		Spores/m ³
Hyphal Elements		Spores/m ³
Torula herbarum		Spores/m ³

TOTAL SPORES: 66 **Spores/m³**

Detection Limits: 11 Spores/m³

Date Analyzed: 2/3/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 1/31/00
Date Reported: 2/7/00
Page 10 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-5 Lab Sample Number: 20 0091-12
Sampling Location: 9th Fl, Office at N End of Corridor from Conf Rm
Date Collected: 1/31/00 Volume/Area: 90 L

TEST REQUESTED: 1054 NON-VIABLE, Spore Trap Analysis

<u>SPORE IDENTIFICATION</u>	<u>RESULTS</u>	<u>UNITS</u>
Ascomycetes		Spores/m ³
Ascospores		Spores/m ³
Basidiomycetes		Spores/m ³
Smuts, Periconia, Myxomycetes	11	Spores/m ³
Basidiomycetes		Spores/m ³
Rusts		Spores/m ³
Dematiaceae/Aspergillus group		Spores/m ³
Alternaria		Spores/m ³
Aspergillus (Asp)		Spores/m ³
Chaetomium		Spores/m ³
Drepanispora/Helminthosporium		Spores/m ³
Colorless		Spores/m ³
Fusarium		Spores/m ³
Exoascus		Spores/m ³
Curvularia		Spores/m ³
Stachybotrys		Spores/m ³
Pollen grains		Spores/m ³
Unknown		Spores/m ³
Epicoccum		Spores/m ³
Aspergillus/Emericella		Spores/m ³
Oidium		Spores/m ³
Trichothecium		Spores/m ³

TOTAL SPORES: 44 Spores/m³

Detection Limits: 11 Spores/m³

Date Analyzed: 2/3/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 1/31/00
 Date Reported: 2/7/00
 Page 11 of 11
 Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-6

Lab Sample Number: 20 0091-13

Sampling Location: Outside

Date Collected: 1/31/00

Volume/Area: 90 L

TEST REQUESTED: 1054 NON-VIABLE, Spore Trap Analysis

SPORE IDENTIFICATION

RESULTS

UNITS

Cladosporium		Spores/m ³
Basidiospores		Spores/m ³
Peronospora		Spores/m ³
Penicillium/Aspergillus group	11	Spores/m ³
Aureobasidium		Spores/m ³
Drechslera / Bipolaris group		Spores/m ³
Arthrinium		Spores/m ³
Botrytis		Spores/m ³
Stachybotrys		Spores/m ³
Unknown	253	Spores/m ³
Hyphal Elements	22	Spores/m ³
Torula herbarum		Spores/m ³

TOTAL SPORES: **330** **Spores/m³**

Detection Limits: 11 Spores/m³

Date Analyzed: 2/3/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 1 of 20
Job ID: 20 0096

Skyline V

Client Sample Number: JASK000201-1 **Lab Sample Number:** 20 0096-01
Sampling Location: 9th Fl, Room 9180
Date Collected: 2/1/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: *Aspergillus niger* 50%
Penicillium species 50%

Date Analyzed: 2/8/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: *Stachybotrys chartarum* (atra) 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/8/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 2 of 20
Job ID: 20 0096

Skyline V

Client Sample Number: JASK000201-2 Lab Sample Number: 20 0096-02
Sampling Location: 9th Fl, Room 9114
Date Collected: 2/1/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Cladosporium species 34%
Phoma species 33%
Sterilia mycelia 33%

Date Analyzed: 2/8/00

Total FUNGAL Count: 42 cfu/m³

FUNGUS Isolated: Cladosporium species 33%
Drechslera species 17%
Penicillium species 17%
Phoma species 17%
Acremonium (Cephalosporium) species 16%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/8/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 3 of 20
Job ID: 20 0096

Skyline V

Client Sample Number: JASK000201-3 **Lab Sample Number:** 20 0096-03

Sampling Location: 9th Floor, Room 9115

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aspegillus ochraceous 100%

Date Analyzed: 2/7/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-4 **Lab Sample Number:** 20 0096-04

Sampling Location: 9th Fl, Room 9111

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/7/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 4 of 20
Job ID: 20 0096

Skyline V

Client Sample Number:	JASK000201-5	Lab Sample Number:	20 0096-05
Sampling Location:	9th Fl, Room 9116		
Date Collected:	2/1/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/7/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000201-6	Lab Sample Number:	20 0096-06
Sampling Location:	9th Fl, Room 9110		
Date Collected:	2/1/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/7/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Stachybotrys chartarum (atra) 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: 1046-00-0043

Date Received: 2/1/00
Date Reported: 2/10/00
Page 5 of 20
Job ID: 20 0096

Skyline V

Client Sample Number:	JASK000201-7	Lab Sample Number:	20 0096-07
Sampling Location:	9 th Fl, Room 9117		
Date Collected:	2/1/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 35 cfu/m³

FUNGUS Isolated:	Penicillium species	40%
	Aspergillus species	20%
	Scopulariopsis candidus	20%
	Sterilia mycelia	20%

Date Analyzed: 2/7/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated:	Penicillium species	100%
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Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 6 of 20
Job ID: 20 0096

Skyline V

Client Sample Number: JASK000201-8 **Lab Sample Number:** 20 0096-08

Sampling Location: 9th Fl, Room 9109

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Date Analyzed: 2/7/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aspergillus species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-9 **Lab Sample Number:** 20 0096-09

Sampling Location: 9th Fl, Room 9118

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/7/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: 1046-00-0043

Date Received: 2/1/00
Date Reported: 2/10/00
Page 7 of 20
Job ID: 20 0096

Skyline V

Client Sample Number: JASK000201-10 **Lab Sample Number:** 20 0096-10
Sampling Location: 9th Fl, Room 9117A
Date Collecte 2/1/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/7/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-11 **Lab Sample Number:** 20 0096-11
Sampling Location: 9th Fl, Room 9108A
Date Collecte 2/1/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/7/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Alternaria species 50%
Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: 1046-00-0043

Date Received: 2/1/00
Date Reported: 2/10/00
Page 8 of 20
Job ID: 20 0096

Skyline V

Client Sample Number: JASK000201-12 Lab Sample Number: 20 0096-12

Sampling Location: 9th Fl, Room 9107

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aspergillus ochraceous 100%

Date Analyzed: 2/7/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-13 Lab Sample Number: 20 0096-13

Sampling Location: 9th Fl, Room 9180A

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Sterilia mycelia 66%

Aspergillus ochraceous 34%

Date Analyzed: 2/7/00

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated: Stachybotrys chartarum (atra) 75%

Penicillium species 25%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 9 of 20
Job ID: 20 0096

Skyline V

Client Sample Number:	JASK000201-14	Lab Sample Number:	20 0096-14
Sampling Location:	9th Fl, Room 9179		
Date Collected:	2/1/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 35 cfu/m³

FUNGUS Isolated: Penicillium species 60%
Cladosporium species 40%

Date Analyzed: 2/7/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000201-15	Lab Sample Number:	20 0096-15
Sampling Location:	9th Fl, Room 9183		
Date Collected:	2/1/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Heteroconium species 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Cladosporium species 50%
Penicillium species 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 10 of 20
Job ID: 20 0096

Skyline V

Client Sample Number: JASK000201-16 **Lab Sample Number:** 20 0096-16
Sampling Location: 9 th Fl, Room 9186
Date Collecte 2/1/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: 21 cfu/m³
FUNGUS Isolated: Streptomyces species 33%
Aureobasidium species 34%
Heteroconium species 33%
Date Analyzed: 2/9/00
Total FUNGAL Count: No Growth.
Detection Limits: 7 cfu/m³
Date Analyzed: 2/9/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-17 **Lab Sample Number:** 20 0096-17
Sampling Location: 9th Fl, Room 9187A
Date Collecte 2/1/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: 14 cfu/m³
FUNGUS Isolated: Penicillium species 100%
Date Analyzed: 2/7/00
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Sterilia mycelia 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/7/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 11 of 20
Job ID: 20 0096

Skyline V

Client Sample Number: JASK000201-18 **Lab Sample Number:** 20 0096-18
Sampling Location: 9th Fl, Room 9178
Date Collected: 2/1/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Date Analyzed: 2/7/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Streptomyces species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-19 **Lab Sample Number:** 20 0096-19
Sampling Location: 9th Fl, Room 9177
Date Collected: 2/1/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Arthrrium 50%

Penicillium species 50%

Date Analyzed: 2/8/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 12 of 20
Job ID: 20 0096

Skyline V

Client Sample Number:	JASK000201-20	Lab Sample Number:	20 0096-20
Sampling Location:	9th Fl, Room 9178B		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Heteroconium species		50%
	Verticillium species		50%
Date Analyzed:	2/9/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Penicillium species		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000201-21	Lab Sample Number:	20 0096-21
Sampling Location:	9th Fl, Room 9188		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	21 cfu/m ³		
FUNGUS Isolated:	Verticillium species		34%
	Sterilia mycelia		33%
	Heteroconium species		33%
Date Analyzed:	2/9/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Skyline V

Date Received: 2/1/00
Date Reported: 2/10/00
Page 13 of 20
Job ID: 20 0096

Client Sample Number: JASK000201-22 **Lab Sample Number:** 20 0096-22

Sampling Location: 9th Fl, Room 9176

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Heteroconium species 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-23 **Lab Sample Number:** 20 0096-23

Sampling Location: 9th Fl, Room 9189

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: 1046-00-0043

Date Received: 2/1/00
Date Reported: 2/10/00
Page 14 of 20
Job ID: 20 0096

Skyline V

Client Sample Number: JASK000201-24 **Lab Sample Number:** 20 0096-24
Sampling Location: 9th Fl, Room 9175
Date Collected: 2/1/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Aspergillus species 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-25 **Lab Sample Number:** 20 0096-25
Sampling Location: 9th Fl, Room 9106
Date Collected: 2/1/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aspergillus species 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: 1046-00-0043

Date Received: 2/1/00
Date Reported: 2/10/00
Page 15 of 20
Job ID: 20 0096

Skyline V

Client Sample Number: JASK000201-26 **Lab Sample Number:** 20 0096-26

Sampling Location: 9th Fl, Room 9103

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Streptomyces species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-27 **Lab Sample Number:** 20 0096-27

Sampling Location: 9th Fl, Room 9104

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Skyline V

Date Received: 2/1/00
Date Reported: 2/10/00
Page 16 of 20
Job ID: 20 0096

Client Sample Number: JASK000201-28 **Lab Sample Number:** 20 0096-28
Sampling Location: Outside
Date Collected: 2/1/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/9/00
Total FUNGAL Count: 14 cfu/m³
FUNGUS Isolated: Cladosporium species 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/9/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-29 **Lab Sample Number:** 20 0096-29
Sampling Location: 9th Fl, Room 9105
Date Collected: 2/1/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Penicillium species 100%
Date Analyzed: 2/9/00
Total FUNGAL Count: No Growth.
Detection Limits: 7 cfu/m³
Date Analyzed: 2/9/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: 1046-00-0043

Date Received: 2/1/00
Date Reported: 2/10/00
Page 17 of 20
Job ID: 20 0096

Skyline V

Client Sample Number: JASK000201-30 **Lab Sample Number:** 20 0096-30
Sampling Location: 9th Fl, Room 9102
Date Collected: 2/1/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Streptomyces species 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Streptomyces species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-31 **Lab Sample Number:** 20 0096-31
Sampling Location: 9th Fl, Room 9190
Date Collected: 2/1/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 18 of 20
Job ID: 20 0096

Client Sample Number:	JASK000201-32	Lab Sample Number:	20 0096-32
Sampling Location:	9th Fl, Room 9192		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Sterilia mycelia		50%
	Heteroconium species		50%
Date Analyzed:	2/9/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000201-33	Lab Sample Number:	20 0096-33
Sampling Location:	9th Fl, Room 9174		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Cladosporium species		100%
Date Analyzed:	2/9/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 19 of 20
Job ID: 20 0096

Skyline V

Client Sample Number:	JASK000201-34	Lab Sample Number:	20 0096-34
Sampling Location:	9th Fl, Room 9191		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Aspergillus species		50%
	Black yeast		50%
Date Analyzed:	2/9/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000201-35	Lab Sample Number:	20 0096-35
Sampling Location:	9th Fl, Room 9193		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Heteroconium species		100%
Date Analyzed:	2/9/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 20 of 20
Job ID: 20 0096

Client Sample Number: JASK000201-36 **Lab Sample Number:** 20 0096-36
Sampling Location: 9th Fl, Room 9194
Date Collected: 2/1/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/9/00
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Sterilia mycelia 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/9/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-37 **Lab Sample Number:** 20 0096-37
Sampling Location: 9th Fl, Room 9101
Date Collected: 2/1/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/9/00
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Alternaria species 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/9/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 1 of 20
Job ID: 20 0107

Client Sample Number: JASK000202-1 **Lab Sample Number:** 20 0107-01
Sampling Location: 9th Fl, Room 9100
Date Collected: 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-2 **Lab Sample Number:** 20 0107-02
Sampling Location: 9th Fl, Room 9099
Date Collected: 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 2 of 20
Job ID: 20 0107

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Client Sample Number:	JASK000202-3	Lab Sample Number:	20 0107-03
Sampling Location:	9th Fl, Room 9098		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-4	Lab Sample Number:	20 0107-04
Sampling Location:	9th Fl, Room 9094		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 3 of 20
Job ID: 20 0107

Skyline V

Client Sample Number:	JASK000202-5	Lab Sample Number:	20 0107-05
Sampling Location:	9th Fl, Room 9095		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-6	Lab Sample Number:	20 0107-06
Sampling Location:	9th Fl, Room 9097		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: 1046-00-0043

Date Received: 2/2/00
Date Reported: 2/10/00
Page 4 of 20
Job ID: 20 0107

Skyline V

Client Sample Number:	JASK000202-7	Lab Sample Number:	20 0107-07
Sampling Location:	9th Fl, Room 9096		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Streptomyces species 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-8	Lab Sample Number:	20 0107-08
Sampling Location:	9th Fl, Room 9093		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: 1046-00-0043

Date Received: 2/2/00
Date Reported: 2/10/00
Page 5 of 20
Job ID: 20 0107

Skyline V

Client Sample Number: JASK000202-9 **Lab Sample Number:** 20 0107-09

Sampling Location: 9th Fl, Room 9119

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-10 **Lab Sample Number:** 20 0107-10

Sampling Location: 9th Fl, Room 9121

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus species 50%

Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 6 of 20
Job ID: 20 0107

Skyline V

Client Sample Number:	JASK000202-11	Lab Sample Number:	20 0107-11
Sampling Location:	9th Fl, Room 9120		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-12	Lab Sample Number:	20 0107-12
Sampling Location:	9th Fl, Room 9122		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 7 of 20
Job ID: 20 0107

Client Sample Number: JASK000202-13 Lab Sample Number: 20 0107-13
Sampling Location: 9th Fl, Room 9124
Date Collected: 2/2/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-14 Lab Sample Number: 20 0107-14
Sampling Location: 9th Fl, Room 9127
Date Collected: 2/2/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Paecilomyces inflatus 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
 Date Reported: 2/10/00
 Page 8 of 20
 Job ID: 20 0107

Skyline V

Client Sample Number: JASK000202-15	Lab Sample Number: 20 0107-15
Sampling Location: 9th Fl, Room 9128	
Date Collected: 2/2/00	Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
 1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-16	Lab Sample Number: 20 0107-16
Sampling Location: Outside	
Date Collected: 2/2/00	Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
 1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated:	Sterilia mycelia	34%
	Cladosporium species	33%
	Yeast	33%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 9 of 20
Job ID: 20 0107

Client Sample Number:	JASK000202-17	Lab Sample Number:	20 0107-17
Sampling Location:	9th Fl, Room 9131		
Date Collected:	2/2/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	No Growth.		
Date Analyzed:	2/9/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000202-18	Lab Sample Number:	20 0107-18
Sampling Location:	9th Fl, Room 9126		
Date Collected:	2/2/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	No Growth.		
Date Analyzed:	2/9/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 10 of 20
Job ID: 20 0107

Skyline V

Client Sample Number:	JASK000202-19	Lab Sample Number:	20 0107-19
Sampling Location:	9th Fl, Room 9123		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-20	Lab Sample Number:	20 0107-20
Sampling Location:	9th Fl, Room 9136A		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 11 of 20
Job ID: 20 0107

Client Sample Number: JASK000202-21 Lab Sample Number: 20 0107-21
Sampling Location: 9th Fl, Room 9130
Date Collected: 2/2/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-22 Lab Sample Number: 20 0107-22
Sampling Location: 9th Fl, Room 9195
Date Collected: 2/2/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Results: Confluent growth of Trichoderma species noted. Quantitation not possible.

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 12 of 20
Job ID: 20 0107

Client Sample Number: JASK000202-23 **Lab Sample Number:** 20 0107-23
Sampling Location: 9th Fl, Room 9196
Date Collecte 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Heteroconium species 100%

Date Analyzed: 2/25/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Heteroconium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/25/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-24 **Lab Sample Number:** 20 0107-24
Sampling Location: 9th Fl, Room 9197
Date Collecte 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: 1046-00-0043

Date Received: 2/2/00
Date Reported: 2/10/00
Page 13 of 20
Job ID: 20 0107

Skyline V

Client Sample Number: JASK000202-25 **Lab Sample Number:** 20 0107-25

Sampling Location: 9th Fl, Room 9198

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Paecilomyces species

100%

Date Analyzed: 2/10/19

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus species

50%

Sterilia mycelia

50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-26 **Lab Sample Number:** 20 0107-26

Sampling Location: 9th Fl, Room 9199

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 14 of 20
Job ID: 20 0107

Skyline V

Client Sample Number: JASK000202-27 **Lab Sample Number:** 20 0107-27

Sampling Location: 9th Fl, Room 9201

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aspergillus species 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Stachybotrys chartarum (atra) 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-28 **Lab Sample Number:** 20 0107-28

Sampling Location: 9th Fl, Room 9201A

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Cladosporium species 34%

Yeast 33%

Sterilia mycelia 33%

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 15 of 20
Job ID: 20 0107

Skyline V

Client Sample Number: JASK000202-29 **Lab Sample Number:** 20 0107-29

Sampling Location: 9th Fl, Room 9202

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Yeast 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-30 **Lab Sample Number:** 20 0107-30

Sampling Location: 9th Fl, Room 9203

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Cladosporium species 50%

Sterilia mycelia 50%

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 16 of 20
Job ID: 20 0107

Skyline V

Client Sample Number: JASK000202-31 **Lab Sample Number:** 20 0107-31

Sampling Location: 9th Fl, Room 9204

Date Collected: 2/2/00

Volume/Area: 141.5L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Alternaria species 50%

Aspergillus ochraceous 50%

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-32 **Lab Sample Number:** 20 0107-32

Sampling Location: 9th Fl, Room 9205

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 17 of 20
Job ID: 20 0107

Client Sample Number: JASK000202-33 **Lab Sample Number:** 20 0107-33
Sampling Location: 9th Fl, Room 9206
Date Collected: 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Cladosporium species 34%
Aspergillus species 33%
Fungus isolated; I.D. to follow 33%

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-34 **Lab Sample Number:** 20 0107-34
Sampling Location: 9th Fl, Room 9207
Date Collected: 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aureobasidium species 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 18 of 20
Job ID: 20 0107

Client Sample Number: JASK000202-35 Lab Sample Number: 20 0107-35
Sampling Location: 9th Fl, Room 9208
Date Collected: 2/2/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Paecilomyces species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-36 Lab Sample Number: 20 0107-36
Sampling Location: 9th Fl, Room 9209
Date Collected: 2/2/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Reported: 2/10/00
Page 19 of 20
Job ID: 20 0107

Client Sample Number: JASK000202-37 **Lab Sample Number:** 20 0107-37
Sampling Location: 9th Fl, Room 9173
Date Collected: 2/2/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/10/00
Total FUNGAL Count: 14 cfu/m³
FUNGUS Isolated: Penicillium species 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/10/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-38 **Lab Sample Number:** 20 0107-38
Sampling Location: 9th Fl, Room 9169
Date Collected: 2/2/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Sterilia mycelia 100%
Date Analyzed: 2/10/00
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Cladosporium species 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/10/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 20 of 20
Job ID: 20 0107

Skyline V

Client Sample Number:	JASK000202-39	Lab Sample Number:	20 0107-39
Sampling Location:	9th Fl, Room 9170		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 1 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-1 **Lab Sample Number:** 20 0110-01

Sampling Location: 9th Fl, Room 9129

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Chrysosporium species 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus species 50%

Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-2 **Lab Sample Number:** 20 0110-02

Sampling Location: 9th Fl, Room 9132

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Chrysosporium species 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 2 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-3 Lab Sample Number: 20 0110-03

Sampling Location: 9th Fl, Room 9133

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia

100%

Date Analyzed: 2/11/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Botrytis

50%

Sterilia mycelia

50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-4

Lab Sample Number: 20 0110-04

Sampling Location: 9th Fl, Room 9134

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Botrytis

100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 3 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-5	Lab Sample Number:	20 0110-05
Sampling Location:	9th Fl, Room, 9135		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	No Growth.		
Date Analyzed:	2/11/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Paecilomyces inflatus		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000203-6	Lab Sample Number:	20 0110-06
Sampling Location:	9th Fl, Room 9136B		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Sterilia mycelia		100%
Date Analyzed:	2/11/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 4 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-7	Lab Sample Number:	20 0110-07
Sampling Location:	9th Fl, Room 9136		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1038 AIR, Stachybotrys Culture 1030 AIR, Total FUNGAL Count w/Identifications		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Cladosporium species		50%
	Sterilia mycelia		50%
Date Analyzed:	2/11/00		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Aspergillus species		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000203-8	Lab Sample Number:	20 0110-08
Sampling Location:	9th Fl, Room 9137		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Botrytis		100%
Date Analyzed:	2/11/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Cladosporium species		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 5 of 23
Job ID: 20 0110

Skyline V

Client Sample Number:	JASK000203-9	Lab Sample Number:	20 0110-09
Sampling Location:	9th Fl, Room 9136C		
Date Collected:	2/3/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated:	Aspergillus species	66%
	Sterilia mycelia	34%

Date Analyzed: 2/11/00

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated:	Aspergillus species	34%
	Paecilomyces inflatus	33%
	Sterilia mycelia	33%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 6 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-10 **Lab Sample Number:** 20 0110-10
Sampling Location: 9th Fl, Room 9138
Date Collected: 2/3/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 42 cfu/m³

FUNGUS Isolated: Penicillium species 67%
Aspergillus species 17%
Paecilomyces species 16%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-11 **Lab Sample Number:** 20 0110-11
Sampling Location: 9th Fl, Room 9139
Date Collected: 2/3/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 7 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-12	Lab Sample Number:	20 0110-12
Sampling Location:	9th Fl, Room 9140		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	21 cfu/m ³		
FUNGUS Isolated:	Penicillium species		66%
	Paecilomyces species		34%
Date Analyzed:	2/11/00		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Penicillium species		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 8 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-13	Lab Sample Number:	20 0110-13
Sampling Location:	9th Fl, Room 9141		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Penicillium species		50%
	Aspergillus species		50%
Date Analyzed:	2/11/00		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Penicillium species		50%
	Streptomyces species		50%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 9 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-14	Lab Sample Number:	20 0110-14
Sampling Location:	9th Fl, Room 9142		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Aspergillus species		50%
	Sterilia mycelia		50%
Date Analyzed:	2/11/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Penicillium species		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 10 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-15	Lab Sample Number:	20 0110-15
Sampling Location:	9th Fl, Room 9143		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	21 cfu/m ³		
FUNGUS Isolated:	Cladosporium species		34%
	Aspergillus niger		33%
	Penicillium species		33%
Date Analyzed:	2/11/00		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Penicillium species		50%
	Aspergillus species		50%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 11 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-16 Lab Sample Number: 20 0110-16
Sampling Location: 9th Fl, Room 9144
Date Collected: 2/3/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%

Cladosporium species 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 12 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-17 **Lab Sample Number:** 20 0110-17

Sampling Location: 9th Fl, Room 9145

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species

100%

Date Analyzed: 2/11/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Paecilomyces species

100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-18 **Lab Sample Number:** 20 0110-18

Sampling Location: 9th Fl, Room 9147

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia

100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 13 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-19	Lab Sample Number:	20 0110-19
Sampling Location:	9th Fl, Room 9167		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	No Growth.		
Date Analyzed:	2/11/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Sterilia mycelia		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000203-20	Lab Sample Number:	20 0110-20
Sampling Location:	9th Fl, Room 9171		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	No Growth.		
Date Analyzed:	2/11/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 14 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-21 Lab Sample Number: 20 0110-21
Sampling Location: 9th Fl, Room 9172
Date Collected: 2/3/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-22 Lab Sample Number: 20 0110-22
Sampling Location: 9th Fl, Room 9158
Date Collected: 2/3/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Heteroconium species 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 15 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-23 **Lab Sample Number:** 20 0110-23
Sampling Location: 9th Fl, Room 9165
Date Collected: 2/3/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/11/00
Total FUNGAL Count: No Growth.
Detection Limits: 7 cfu/m³
Date Analyzed: 2/11/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-24 **Lab Sample Number:** 20 0110-24
Sampling Location: 9th Fl, Room 9157
Date Collected: 2/3/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/11/00
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Sterilia mycelia 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/11/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 16 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-25 **Lab Sample Number:** 20 0110-25
Sampling Location: 9th Fl, Room 9164
Date Collected: 2/3/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Botrytis 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-26 **Lab Sample Number:** 20 0110-26
Sampling Location: 9th Fl, Room 9163
Date Collected: 2/3/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 18 of 23
Job ID: 20 0110

Skyline V

Client Sample Number: JASK000203-29 Lab Sample Number: 20 0110-29

Sampling Location: Outside Air, Roof

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus species

100%

Date Analyzed: 2/11/00

Total FUNGAL Count: 91 cfu/m³

FUNGUS Isolated: Penicillium species

38%

Aspergillus species

31%

Phoma species

8%

Paecilomyces species

8%

Cladosporium species

8%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 19 of 23
Job ID: 20 0110

Skyline V

Client Sample Number:	JASK000203-30	Lab Sample Number:	20 0110-30
Sampling Location:	9th Fl, Room 9152		
Date Collected:	2/3/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Heteroconium species 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: 35 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000203-31	Lab Sample Number:	20 0110-31
Sampling Location:	9th Fl, Room 9154		
Date Collected:	2/3/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%

Alternaria species 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 20 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-32 **Lab Sample Number:** 20 0110-32
Sampling Location: 9th Fl, Room 9151
Date Collected: 2/3/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: 21 cfu/m³
FUNGUS Isolated: Penicillium species 67%
Paecilomyces species 33%
Date Analyzed: 2/11/00
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Aspergillus species 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/11/00
Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: JASK000203-33 **Lab Sample Number:** 20 0110-33
Sampling Location: 9th Fl, Room 9150
Date Collected: 2/3/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: 21 cfu/m³
FUNGUS Isolated: Penicillium species 67%
Sterilia mycelia 33%
Date Analyzed: 2/11/00
Total FUNGAL Count: 14 cfu/m³
FUNGUS Isolated: Sterilia mycelia 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/11/00
Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 21 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-34 Lab Sample Number: 20 0110-34
Sampling Location: 9th Fl, Room 9148
Date Collected: 2/3/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Streptomyces species 67%
Sterilia mycelia 33%

Date Analyzed: 2/11/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: JASK000203-35 Lab Sample Number: 20 0110-35
Sampling Location: 9th Fl, Room 9149
Date Collected: 2/3/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 22 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-36	Lab Sample Number:	20 0110-36
Sampling Location:	9th Fl, Room 9146		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Penicillium species		100%
Date Analyzed:	2/11/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Penicillium species		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Patricia R. Vestal, M.S., SM (ASCP)		

Client Sample Number:	JASK000203-37	Lab Sample Number:	20 0110-37
Sampling Location:	9th Fl, Rm 9173, Under Wallpaper, West, Wind.		
Date Collected:	2/3/00	Volume/Area:	1" x 1"
TEST REQUESTED:	1037 WIPE, Stachybotrys Culture & Total Fungal Count 1031 WIPE, Total FUNGAL Count w/identifications		
Total FUNGAL Count:	20 cfu/in ²		
FUNGUS Isolated:	Penicillium species		100%
Date Analyzed:	2/11/00		
Total FUNGAL Count:	20 cfu/in ²		
FUNGUS Isolated:	Heteroconium species		100%
Detection Limits:	10 cfu/in ²		
Date Analyzed:	2/11/00		
Analyst:	Patricia R. Vestal, M.S., SM (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 23 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-38	Lab Sample Number:	20 0110-38
Sampling Location:	9th Fl, Rm 9173, On Concrete Fl. under Carpet		
Date Collected:	2/3/00	Volume/Area:	1" x 1"
TEST REQUESTED:	1031 WIPE, Total FUNGAL Count w/Identifications 1037 WIPE, Stachybotrys Culture & Total Fungal Count		
Total FUNGAL Count:	40 cfu/in ²		
FUNGUS Isolated:	Penicillium species		67%
	Paecilomyces species		33%
Date Analyzed:	2/11/00		
Total FUNGAL Count:	10 cfu/in ²		
FUNGUS Isolated:	Penicillium species		100%
Detection Limits:	10 cfu/in ²		
Date Analyzed:	2/11/00		
Analyst:	Patricia R. Vestal, M.S., SM (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 1 of 11
Job ID: 20 0114

Client Sample Number: JASK000204-1 **Lab Sample Number:** 20 0114-01

Sampling Location: 6th Fl, Ste. 602, Hall Area at Entr. to Richey's

Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Penicillium species 34%
Chrysosporium species 33%
Sterilia mycelia 33%

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 2 of 11
Job ID: 20 0114

Client Sample Number: JASK000204-2 **Lab Sample Number:** 20 0114-02

Sampling Location: 6th Fl, Ste. 601, Open Area near Waiter's Cub.

Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aspergillus niger 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Penicillium species 34%

Chrysosporium species 33%

Sterilia mycelia 33%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000204-3 **Lab Sample Number:** 20 0114-03

Sampling Location: 6th Fl, Ste. 601, Y. Askew's Cubicle

Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%

Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 3 of 11
Job ID: 20 0114

Skyline V

Client Sample Number: JASK000204-4 **Lab Sample Number:** 20 0114-04

Sampling Location: 4th Fl, Ste. 403, E. Forbes' Office

Date Collected: 2/4/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Chrysosporium species 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000204-5 **Lab Sample Number:** 20 0114-05

Sampling Location: 4th Fl, Ste. 401, in Hall at Pepsi Machine

Date Collected: 2/4/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 4 of 11
Job ID: 20 0114

Skyline V

Client Sample Number: JASK000204-6 **Lab Sample Number:** 20 0114-06
Sampling Location: 8th Fl, Ste. 810, Recpt. Area of L. DeLoach
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000204-7 **Lab Sample Number:** 20 0114-07
Sampling Location: 8th Fl, Ste., 810, Rm 8008
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Chrysosporium species 50%

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 5 of 11
Job ID: 20 0114

Client Sample Number: JASK000204-8 **Lab Sample Number:** 20 0114-08
Sampling Location: 8th Fl, Ste. 808, Recpt. Area at E. Hemsath's Of.
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Black yeast 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000204-13 **Lab Sample Number:** 20 0114-09
Sampling Location: 9th Fl, Rm 9053
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 6 of 11
Job ID: 20 0114

Skyline V

Client Sample Number: JASK000204-14 Lab Sample Number: 20 0114-10

Sampling Location: 9th Fl, Rm 9161

Date Collected: 2/4/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Chaetomium species 25%
Black yeast 10%

Date Analyzed: 2/10/00

Total FUNGAL Count: 70 cfu/m³

FUNGUS Isolated: Penicillium species 70%
Paecilomyces species 20%
Sterilia mycelia 10%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 7 of 11
Job ID: 20 0114

Skyline V

Client Sample Number: JASK000204-15 Lab Sample Number: 20 0114-11

Sampling Location: 1st Fl, Ste. 103 (BC2A Program Office), Rm 150

Date Collected: 2/4/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 8 of 11
Job ID: 20 0114

Skyline V

Client Sample Number: JASK000204-16 Lab Sample Number: 20 0114-12

Sampling Location: 1st Fl, Ste. 105 (DISA Counter Drug Of.)

Date Collected: 2/4/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 150 cfu/m³

FUNGUS Isolated: Penicillium species 95%
Cladosporium species 5%

Date Analyzed: 2/10/00

Total FUNGAL Count: 98 cfu/m³

FUNGUS Isolated: Penicillium species 79%
Cladosporium species 7%
Rhodotorula species 7%
Yeast 7%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000204-17 Lab Sample Number: 20 0114-13

Sampling Location: 1st Fl, Ste. 107 (SSO), Open Area, Center

Date Collected: 2/4/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 9 of 11
Job ID: 20 0114

Client Sample Number: JASK000204-18 **Lab Sample Number:** 20 0114-14
Sampling Location: 1st Fl, Ste. 100 (Security), Rm 107
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Alternaria species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000204-19 **Lab Sample Number:** 20 0114-15
Sampling Location: 6th Fl, Ste. 602, Mr. Cole's Desk
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Sterilia mycelia 50%

Alternaria species 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 10 of 11
Job ID: 20 0114

Client Sample Number: JASK000204-20 **Lab Sample Number:** 20 0114-16
Sampling Location: 4th Fl, Ste. 400, M. Brayleih Cubicle
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Alternaria species 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000204-21 **Lab Sample Number:** 20 0114-17
Sampling Location: 4th Fl, Ste. 400, M. Maloney's Office
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00

Date Reported: 2/15/00

Page 11 of 11

Job ID: 20 0114

Client Sample Number: JASK000204-22 **Lab Sample Number:** 20 0114-18

Sampling Location: 4th Fl, Ste. 404, Rm 470, Rear

Date Collected: 2/4/00

Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000204-23 **Lab Sample Number:** 20 0114-19

Sampling Location: Outside Air (OA), Roof

Date Collected: 2/4/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Reported: 2/20/00
Page 1 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-01 **Lab Sample Number:** 20 0127-01

Sampling Location: 6th Floor, Suite 624, Room 635

Date Collecte 2/9/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 110 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/17/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%

Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: JASK000209-02 **Lab Sample Number:** 20 0127-02

Sampling Location: 6th Floor, Suite 624, Reception Area, Room 650

Date Collecte 2/9/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Date Analyzed: 2/17/00

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Penicillium species 67%

Cladosporium species 33%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/9/00
Date Reported: 2/20/00
Page 2 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-03 **Lab Sample Number:** 20 0127-03

Sampling Location: 6th floor, Suite 638-640, Room 638, Reception

Date Collected: 2/9/00

Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 49 cfu/m³

FUNGUS Isolated: Aspergillus fumigatus 72%
Penicillium species 14%
Cladosporium species 14%

Date Analyzed: 2/17/00

Total FUNGAL Count: 42 cfu/m³

FUNGUS Isolated: Aspergillus fumigatus 67%
Cladosporium species 33%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/9/00
Date Reported: 2/20/00
Page 3 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-04 **Lab Sample Number:** 20 0127-04

Sampling Location: 5th floor, Suite 538-542, Sam Brown's Office, Room 539

Date Collected: 2/9/19

Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Aspergillus species 67%
Penicillium species 33%

Date Analyzed: 2/17/00

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated: Aspergillus species 75%
Cladosporium species 25%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/9/00
Date Reported: 2/20/00
Page 4 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-05 Lab Sample Number: 20 0127-05
Sampling Location: 5th floor, Suite 538-542, GME room
Date Collected: 2/9/19 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Paecilomyces species 25%
Aspergillus fumigatus 25%

Date Analyzed: 2/17/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Aspergillus fumigatus 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 5 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-06 Lab Sample Number: 20 0127-06
Sampling Location: 6th floor, Suite 638-640, Room 636
Date Collected: 2/9/19 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus fumigatus 50%
Sterilia mycelia 50%

Date Analyzed: 2/17/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus fumigatus 50%
Cladosporium species 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: JASK000209-07 Lab Sample Number: 20 0127-07
Sampling Location: 1st floor, Skyline IV, Suite 110, Room 105, Karen Brown's
Date Collected: 2/9/19 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: No growth

Date Analyzed: 2/17/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Stachybotrys chartarum (atra) 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 6 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-13 Lab Sample Number: 20 0127-08
Sampling Location: 5th floor, Randall Koran's Office, Suite 550-559
Date Collected: 2/9/19 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Penicillium species 67%
Sterilia mycelia 33%

Date Analyzed: 2/17/00

Total FUNGAL Count: 42 cfu/m³

FUNGUS Isolated: Penicillium species 66%
Cladosporium species 17%
Sterilia mycelia 17%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/9/00
Date Reported: 2/20/00
Page 7 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-14 Lab Sample Number: 20 0127-09
Sampling Location: 5th Floor, Sherrell Kern's Cubicle, Suite 550-559
Date Collected: 2/9/19 Volume/Area: 141.5 L
TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Results: Unable to quantitate due to nature of mucoraceous organism.

FUNGUS Isolated: Penicillium species
Rhizopus species

Date Analyzed: 2/17/00

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated: Penicillium species 75%
Rhizopus species 25%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 8 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-15 Lab Sample Number: 20 0127-10

Sampling Location: 5th F., Lt. Colonel Teresa Somnese, Suite 550-559

Date Collected: 2/9/19

Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Sterilia mycelia 50%

Date Analyzed: 2/17/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/9/00
Date Reported: 2/20/00
Page 9 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-16 Lab Sample Number: 20 0127-11
Sampling Location: 5th Floor, Suite 517, Sonya Mercurius
Date Collected: 2/9/19 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 98 cfu/m³

FUNGUS Isolated:

Aspergillus fumigatus	79%
Penicillium species	7%
Pithomyces species	7%
Sterilia mycelia	7%

Date Analyzed: 2/17/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated:

Aspergillus fumigatus	50%
Alternaria species	50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

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1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 10 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-17 Lab Sample Number: 20 0127-12
Sampling Location: 5th Floor, Suite 517, Mark McKenzie
Date Collected: 2/9/19 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 42 cfu/m³

FUNGUS Isolated: Penicillium species 34%
Aspergillus fumigatus 33%
Stenilia mycelia 33%

Date Analyzed: 2/17/00

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated: Aspergillus fumigatus 75%
Penicillium species 25%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 11 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-18 **Lab Sample Number:** 20 0127-13
Sampling Location: 5th Floor, Suite 500, M. Graves' Cubicle
Date Collected: 2/9/19 **Volume/Area:** 141.5 L
TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/Identifications
Total FUNGAL Count: 7 c f u / m³
FUNGUS Isolated: Aspergillus fumigatus 100%
Date Analyzed: 2/17/00
Total FUNGAL Count: 7 c f u / m³
FUNGUS Isolated: Aspergillus species 100%
Detection Limits: 7 c f u / m³
Date Analyzed: 2/17/00
Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: JASK000209-19 **Lab Sample Number:** 20 0127-14
Sampling Location: 5th Fl., Suite 500, Cubicle Area, Ms. Harrington
Date Collected: 2/9/19 **Volume/Area:** 141.5 L
TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/Identifications
Total FUNGAL Count: 7 c f u / m³
FUNGUS Isolated: Alternaria species 100%
Date Analyzed: 2/17/00
Total FUNGAL Count: 14 c f u / m³
FUNGUS Isolated: Penicillium species 100%
Detection Limits: 7 c f u / m³
Date Analyzed: 2/17/00
Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/9/00
Date Reported: 2/20/00
Page 12 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-20 **Lab Sample Number:** 20 0127-15

Sampling Location: Outside air, Roof

Date Collected: 2/9/19

Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 77 cfu/m³

FUNGUS Isolated:	Penicillium species	45%
	Sterilia mycelia	36%
	Cladosporium species	11%

Date Analyzed: 2/17/00

Total FUNGAL Count: 35 cfu/m³

FUNGUS Isolated:	Cladosporium species	40%
	Aspergillus niger	20%
	Alternaria species	20%
	Penicillium species	20%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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1046-00-0043

Date Received: 2/10/99
Date Reported: 2/21/00
Page 1 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-01 **Lab Sample Number:** 20 0133-01
Sampling Location: 6th Fl, Suite 638-640, N , AHU1, Room 638, Rec Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-02 **Lab Sample Number:** 20 0133-02
Sampling Location: 6th F, Suite 624, N , AHU1, Rec, Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/10/99
Date Reported: 2/21/00
Page 2 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-03 **Lab Sample Number:** 20 0133-03
Sampling Location: 6th F, Suite 602, S , AHU2, Entr Richey/Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 10 cfu/in²

FUNGUS Isolated: Sterilia mycelia 100%

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-04 **Lab Sample Number:** 20 0133-04
Sampling Location: 6th F, Suite 601, S , AHU2, Y. Askew Cub S. Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/10/99
Date Reported: 2/21/00
Page 3 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-05 **Lab Sample Number:** 20 0133-05
Sampling Location: 4th F, Suite 400, S , AHU2, J. Thomas Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 1 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-06 **Lab Sample Number:** 20 0133-06
Sampling Location: 4th F, Suite 403, N , AHU1, E. Forbes Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/10/99
Date Reported: 2/21/00
Page 4 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-07 **Lab Sample Number:** 20 0133-07
Sampling Location: 4th F, Suite 401, N , AHU1, hall 36' E Pepsi Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-08 **Lab Sample Number:** 20 0133-08
Sampling Location: 4th F, Suite 404, N , AHU1, Cub 402C, Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99
Date Reported: 2/21/00
Page 5 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-09 **Lab Sample Number:** 20 0133-09
Sampling Location: 8th F, Ste. 808, S., AHU2, Rec/Keegan Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-10 **Lab Sample Number:** 20 0133-10
Sampling Location: 8th F, Suite 810, S, AHU2, Rec/Deloach Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/10/99
Date Reported: 2/21/00
Page 6 of 23
Job ID: 20 0133

1046-00-0043

Client Sample Number:	JASK000210-11	Lab Sample Number:	20 0133-11
Sampling Location:	5th F, Ste 500-559, N , AHU1, Rec/Matthew Sup		
Date Collected:	2/10/00	Volume/Area:	1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 20 cfu/in²

FUNGUS Isolated: Rhizopus species 50%
Aspergillus niger 50%

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000210-12	Lab Sample Number:	20 0133-12
Sampling Location:	5th F, Ste 517, N , AHU1, Mercurius Sup Lvr		
Date Collected:	2/10/00	Volume/Area:	1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 7 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-13 **Lab Sample Number:** 20 0133-13

Sampling Location: 5th F, Ste 500, S, AHU2, Szymanski Sup Lvr

Date Collected: 2/10/00

Volume/Area: 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 150 cfu/in²

FUNGUS Isolated: Aspergillus species 66%

Aspergillus niger 34%

Date Analyzed: 2/16/00

Total FUNGAL Count: 100 cfu/in²

FUNGUS Isolated: Aspergillus species 100%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99
Date Reported: 2/21/00
Page 8 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-14 **Lab Sample Number:** 20 0133-14
Sampling Location: 5th F, Ste 537-544, N, AHU1, Rm 599, Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 30 cfu/in²

FUNGUS Isolated: Cladosporium species 66%
Aspergillus species 34%

Date Analyzed: 2/16/00

Total FUNGAL Count: 30 cfu/in²

FUNGUS Isolated: Cladosporium species 66%
Aspergillus species 34%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-15 **Lab Sample Number:** 20 0133-15
Sampling Location: 9th F, Rm 9182, S, AHU2, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 9 of 23

Job ID: 20 0133

Client Sample Number:	JASK000210-16	Lab Sample Number:	20 0133-16
Sampling Location:	9th Floor, Conference Room, Supply Louver		
Date Collected:	2/10/00	Volume/Area:	1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000210-17	Lab Sample Number:	20 0133-17
Sampling Location:	9th F, Rm 9113, N, AHU1, Supply Louver		
Date Collected:	2/10/00	Volume/Area:	1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/10/99
Date Reported: 2/21/00
Page 10 of 23
Job ID: 20 0133

1046-00-0043

Client Sample Number: JASK000210-18 **Lab Sample Number:** 20 0133-18
Sampling Location: 9th R, Rm 9112, N, AHU1, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-19 **Lab Sample Number:** 20 0133-19
Sampling Location: 9th F, Rm 9116, N, AHU1, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" mx 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 40 cfu/in²

FUNGUS Isolated: Penicillium species 75%
Sterilia mycelia 25%

Date Analyzed: 2/16/00

Total FUNGAL Count: 30 cfu/in²

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/10/99
Date Reported: 2/21/00
Page 11 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-20 **Lab Sample Number:** 20 0133-20
Sampling Location: 9th F, Room 9101, N , AHU1, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"
TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications
Total FUNGAL Count: No Growth.
Date Analyzed: 2/16/00
Total FUNGAL Count: No Growth.
Detection Limits: 10 cfu/in²
Date Analyzed: 2/16/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-21 **Lab Sample Number:** 20 0133-21
Sampling Location: 9th F, Rm 9121, N , AHU1, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"
TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications
Total FUNGAL Count: No Growth.
Date Analyzed: 2/16/00
Total FUNGAL Count: No Growth.
Detection Limits: 10 cfu/in²
Date Analyzed: 2/16/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99
Date Reported: 2/21/00
Page 12 of 23
Job ID: 20 0133

Client Sample Number:	JASK000210-22	Lab Sample Number:	20 0133-22
Sampling Location:	9th R, Rm 9128, N , AHU1, Supply Louver		
Date Collected:	2/10/00	Volume/Area:	1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000210-23	Lab Sample Number:	20 0133-23
Sampling Location:	9th F, Rm 9137, N , AHU1, Supply Louver		
Date Collected:	2/10/00	Volume/Area:	1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

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1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 13 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-24 **Lab Sample Number:** 20 0133-24
Sampling Location: 9th F, Rm 9150, S, AHU2, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-25 **Lab Sample Number:** 20 0133-25
Sampling Location: 9th F, Rm 9163, S, AHU2, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 14 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-26 **Lab Sample Number:** 20 0133-26
Sampling Location: 9th F, Rm 9158, S, AHU2, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-27 **Lab Sample Number:** 20 0133-27
Sampling Location: 9th F, Rm 9198, S, AHU2, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99
Date Reported: 2/21/00
Page 15 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-28 **Lab Sample Number:** 20 0133-28
Sampling Location: 9th F, Rm 9187A, S , AHU2, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-29 **Lab Sample Number:** 20 0133-29
Sampling Location: 1st F, Ste 107, S , AHU2, Rear Rm Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 10 cfu/in²

FUNGUS Isolated: Sterilia mycelia 100%

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/10/99
Date Reported: 2/21/00
Page 16 of 23
Job ID: 20 0133

1046-00-0043

Client Sample Number: JASK000210-30 **Lab Sample Number:** 20 0133-30
Sampling Location: AHU # 1, Filter Side of Coil Supply air System
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 100 cfu/in²

FUNGUS Isolated:	Rhodotorula species	40%
	Streptomyces species	30%
	Sterilia mycelia	20%
	Aureobasidium species	10%

Date Analyzed: 2/16/00

Total FUNGAL Count: 130 cfu/in²

FUNGUS Isolated:	Streptomyces species	69%
	Sterilia mycelia	15%
	Penicillium species	8%
	Cladosporium species	8%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: Skyline V

1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 17 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-31 **Lab Sample Number:** 20 0133-31

Sampling Location: AHU1, Fan Side of Coil, Supply Air System

Date Collected: 2/10/00

Volume/Area: 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 5400 cfu/in²

FUNGUS Isolated:

Rhodotorula species	87%
Yeast	8%
Cladosporium species	1%
Penicillium species	1%
Pithomyces species	1%

Date Analyzed: 2/16/00

Total FUNGAL Count: 6100 cfu/in²

FUNGUS Isolated:

Rhodotorula species	90%
Yeast	3%
Penicillium species	1%
Cladosporium species	1%
Sterilia mycelia	1%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 18 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-32 **Lab Sample Number:** 20 0133-32

Sampling Location: AHU1, Axial Vane, Return Air System

Date Collected: 2/10/00

Volume/Area: 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 80 cfu/in²

FUNGUS Isolated:	Chaetomium species	38%
	Aspergillus species	25%
	Penicillium species	12%
	Epicoccum species	12%
	Cladosporium species	12%

Date Analyzed: 2/16/00

Total FUNGAL Count: 80 cfu/in²

FUNGUS Isolated:	Aspergillus species	63%
	Chaetomium species	27%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

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Project: Skyline V

1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 19 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-33 Lab Sample Number: 20 0133-33

Sampling Location: AHU1, Axial Vane, Return Air System

Date Collected: 2/10/00

Volume/Area: 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 76 cfu/in²

FUNGUS Isolated: Chaetomium species 86%

Aspergillus niger 14%

Date Analyzed: 2/16/00

Total FUNGAL Count: 60 cfu/in²

FUNGUS Isolated: Chaetomium species 66%

Cladosporium species 17%

Rhizopus species 17%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99
Date Reported: 2/21/00
Page 20 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-34 Lab Sample Number: 20 0133-34
Sampling Location: AHU2, Filter Side of Coil, Supply Air System
Date Collected: 2/10/00 Volume/Area: 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 60 cfu/in²

FUNGUS Isolated:	Alternaria species	34%
	Yeast	17%
	Black yeast	17%
	Cladosporium species	16%
	Sterilia mycelia	16%

Date Analyzed: 2/16/00

Total FUNGAL Count: 90 cfu/in²

FUNGUS Isolated:	Sterilia mycelia	56%
	Alternaria species	11%
	Yeast	11%
	Cladosporium species	11%
	Penicillium species	11%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99
Date Reported: 2/21/00
Page 21 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-35 **Lab Sample Number:** 20 0133-35
Sampling Location: AHu2, Fan Side of Coil, Supply Air System
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 6900 cfu/in²

FUNGUS Isolated:

Streptomyces species	56%
Rhodotorula species	40%
Cladosporium species	1%
Sterilia mycelia	1%

Date Analyzed: 2/16/00

Total FUNGAL Count: 3800 cfu/in²

FUNGUS Isolated:

Streptomyces species	51%
Rhodotorula species	43%
Cladosporium species	1%
Epicoccum species	1%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Attn:
Project: Skyline V

1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 22 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-36 **Lab Sample Number:** 20 0133-36

Sampling Location: AHU2, Shaft Side Axial Vane, Return Air System

Date Collected: 2/10/00 **Volume/Area:** 1" x 1'

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 10 cfu/in²

FUNGUS Isolated: Stachybotrys chartarum (atra) 100%

Date Analyzed: 2/16/00

Total FUNGAL Count: 30 cfu/in²

FUNGUS Isolated: Penicillium species 34%

Aspergillus species 33%

Streptomyces species 33%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99
Date Reported: 2/21/00
Page 23 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-37 **Lab Sample Number:** 20 0133-37
Sampling Location: AHU2, Motor Side Axial Vane, Return Air System
Date Collected: 2/10/00 **Volume/Area:** 1' x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 190 cfu/in²

FUNGUS Isolated:

Penicillium species	42%
Aspergillus niger	21%
Cladosporium species	16%
Stachybotrys chartarum (atra)	5%
Chaetomium species	5%

Date Analyzed: 2/16/00

Total FUNGAL Count: 150 cfu/in²

FUNGUS Isolated:

Penicillium species	60%
Aspergillus species	7%
Rhizopus species	7%
Aspergillus niger	7%
Chaetomium species	7%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

ATTACHMENT C

Description of Common Fungal Organisms

Fungi

***Alternaria* species**

The fungal species *Alternaria* is a worldwide outdoor mold that flourishes seasonally in warm and humid conditions. Colonies of *Alternaria* are found on textiles and fruits, especially tomatoes, and may be linked to Baker's asthma.

Aspergillus* species, *Aspergillus niger*, *Aspergillus ochraceous

Aspergillus is a fungal species which can cause a condition known as Hypersensitivity Pneumonitis syndrome (a lower lung, allergic-type condition) in susceptible individuals. Hypersensitivity Pneumonitis can occur in certain individuals who become "sensitized" to these organisms over a period of time. In most cases, adverse health consequences of exposure to these organisms are seen only in "hypersensitive" individuals. It has also been reported that non-viable cell products and VOCs are believed to be responsible for some adverse health effects. *Aspergillus niger* is considered an "opportunistic pathogen" (disease-causing agent). Normally, individuals have a high degree of immunity to this microbe. However, individuals whose immune systems are compromised by certain medical conditions are more susceptible to infection. The organism can cause a lung disease known as Aspergillosis (a fungal lung infection), and is the usual cause of a sinus infection known as otomycosis. *Aspergillus* is unique as it thrives in warm temperatures (>40°) and, therefore, its growth peaks with indoor heating (e.g., in autumn and winter). It is commonly culturable from house basements, bedding, house dust and raw textiles on upholstered furniture. Inhaled spores can lead to several well-defined diseases: allergic asthma, hypersensitivity pneumonitis, invasive aspergillosis, aspergilloma (fungus ball), and allergic bronchopulmonary aspergillosis.

***Aureobasidium* species**

Aureobasidium are fungi that thrive in moist environments, and are considered common environmental contaminants. Typically, they are not associated with BRI, but can be linked to hypersensitivity pneumonitis in susceptible individuals.

***Botrytis* species**

Botrytis is also an environmental fungal organism with no known adverse health effects. It is commonly isolated as a contaminant in environmental cultures.

***Chaetomium* species**

Chaetomium species are found on a variety of substrates containing cellulose, including paper and plant compost. These fungi are commonly identified as contaminants in clinical cultures, and have been occasionally implicated as allergens.

***Cladosporium* species**

The genus *Cladosporium* (also known as *Hormodendrum*) is the most commonly isolated fungus in the world, and is composed of 25 different species of mold that thrive in temperate zones throughout the world. Rain drops or moisture liberate spores from decaying leaves, which go on to produce velvety olive green, brown or greenish-grey

colonies. *Cladosporium* can readily be detected in homes with poor ventilation and around painted areas of moist window frames. Their spores have been found in some face creams, paints, commercial soil and textiles. *Cladosporium* spores can survive under refrigeration. Patients are commonly assessed for *Cladosporium* sensitivity using extracts from spores and mycelia of *Cladosporium herbarum*. *Cladosporium* species flourish outdoors, and are commonly found in indoor office environments and within air handling systems that introduce outside ventilation air to their buildings.

***Geotrichum* species**

Geotrichum species can cause geotrichosis, which is a rare infection that is known to have produced lesions in the lungs, mouth, intestines, vagina, and skin. Fungemia and disseminated infections have also been reported. *Geotrichum* is found as normal flora in humans and seems to cause disease only in compromised hosts.

***Hyalodendrum* species**

Hyalodendron species are fungi similar to *Cladosporium* which are commonly found outdoors on decaying wood and other organic materials. They are non-pathogenic in humans.

***Mucor* species**

Mucor species are fungi that are commonly found as contaminants in environmental cultures. They are occasionally associated with zygomycosis, predominantly in patients who are predisposed to disease by diabetes, immunosuppression, AIDS, severe burns, intravenous drug use, and malnutrition. Mucoracious species quickly cover agar surfaces with fluff resembling cotton candy. This frequently causes other organisms on a culture plate to become obscured, and therefore unable to be quantified.

***Penicillium* species**

Penicillium species are widespread in nature being found on fruits, vegetables, and other substrates that may provide nutriment. The *Penicillium* species can cause a condition known as Hypersensitivity Pneumonitis syndrome (a lower lung, allergic-type condition) in susceptible individuals. Hypersensitivity Pneumonitis can occur in certain individuals who become "sensitized" to the organism over a period of time. In most cases, adverse health consequences of exposure to this organism are seen only in "hypersensitive" individuals or those with compromised immune systems. It has also been reported that non-viable cell products and VOCs are believed to be responsible for some adverse health effects. The reference, Medically Important Fungi by D. Larone, Ph.D., states that *Penicillium* species are found in a variety of diseases in which its etiologic significance is uncertain. *Penicillium* has been known to cause keratitis (inflammation of the cornea) and external ear infections. Some strains of *Penicillium* produce toxins.

***Phoma* species**

Phoma species are commonly considered to be environmental fungal contaminants. They are occasional agents of phaeohyphomycosis, but are not typically associated with BRI.

***Rhizopus* species**

Rhizopus species have been found to be etiologic agents of zygomycosis, predominantly in clinical patients who are predisposed to disease by diabetes, immunosuppression, AIDS, severe burns, intravenous drug abuse, malnutrition, etc. They are commonly isolated as environmental contaminants in laboratory cultures, and quickly cover agar surfaces with dense growth.

***Rhodotorula* species**

Rhodotorula species is a yeast-like fungus that is commonly isolated as a contaminant in clinical laboratory cultures. It occurs on damp organic materials and is found outdoors in temperate regions. It is not uncommon to find this organism in HVAC systems in buildings using outdoor air in their ventilation systems. It can infect particularly susceptible individuals during the terminal stages of debilitating diseases such as carcinoma and bacterial endocarditis.

***Stachybotrys* species**

Identification of *Stachybotrys chartarum* can occur when organic building materials become wet and stay wet for extended periods of time. The fact that this fungus was identified in the air is cause for concern, because the airborne fungus can result in exposures leading to adverse health effects when inhaled by building occupants.

Stachybotrys chartarum most commonly grows on damp cellulose, and is found in high concentrations in agricultural products such as hay or straw. In indoor environments, it may be found in areas with severe water leaks, and grows readily on the paper backing component of gypsum wallboard in wall cavities and in other environments where conditions for growth are suitable. It can also enter buildings from outdoor sources such as occupants and ventilation systems utilizing outside air for ventilation. *Stachybotrys chartarum* has been recently implicated in an outbreak of pulmonary hemorrhage in infants in the Cleveland area in flooded homes. *Stachybotrys chartarum* produces strong mycotoxins (toxic byproduct given off during growth). These mycotoxins have been linked to adverse health effects including contact irritation that can lead to mucous membrane irritation including sore throat and irritation of the conjunctiva around the eye, cough, rhinitis, burning sensations in the mouth, throat, and nasal passages, and cutaneous (skin) irritation at the points of toxin contact. Nosebleeds are also common, and tracheal bleeding has been occasionally reported.

Sterilia mycelia

Sterilia mycelia are fungal organisms that do not sporulate, and are therefore non-reproductive. Sterile hyphae are molds that do not produce conidia (spores), and that are not able to be speciated as a result. They are non-pathogenic to humans, and have not been implicated in BRI.

Ustilago species

Ustilago species are fungi that are parasitic on the seeds and flowers of many cereals and grasses, and are commonly isolated as contaminants in environmental cultures. They are seldom implicated in human disease, but may be inhaled and subsequently isolated from sputum specimens.

Yeast

Yeasts are the most common fungi isolated in the clinical laboratory. They are ubiquitous in the environment and also live as normal inhabitants in our bodies. Yeasts are considered to be opportunistic pathogens, causing disease in patients with compromised immune systems, with intravascular catheters, with diabetes mellitus, intravenous drug abusers, and those on extended antibiotic treatments. They may be allergenic to susceptible individuals if present in sufficient quantities.



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March 13, 2000

Ms. Normajean P. Eleazer
Contracting Officer's Representative
General Services Administration
Regional Office Building
7th & D. Street, Room 2080 (WPX)
Washington, D.C. 20407

RE: Skyline V Building – Microbial Sampling Survey Report

Dear Ms. Eleazer:

Under Contract GS11P99YAD0719, Delivery Order P-11-00-DC-0104, Applied Environmental, Inc. conducted microbial sampling in locations throughout the Skyline V office building, located at 5111 Leesburg Pike, Falls Church, Virginia. The survey was performed between January 31 and February 10, 2000, and consisted of air sampling to measure airborne fungi in locations throughout the building. Air sampling for non-viable fungal spores was performed in selected ninth floor locations, and wipe sampling for surface fungi was performed in several ninth floor locations and on various components of the air-handling system. Viable air sampling was performed on standard fungal media as well as on media preferred by *Stachybotrys*.

The sampling was performed by Robert Grosso, IHIT, CHMM, and Jeffrey Amy, Industrial Hygienist. Technical oversight for the project was provided by David P. O'Konski, CIH, CSP.

The survey was performed following the identification of *Stachybotrys chartarum* (*atra*) in samples previously collected from the ninth floor conference room and surrounding office areas. The initial sampling was prompted by extensive water damage in the ninth floor conference room.

SUMMARY

Fungal air sampling results were generally low, with concentrations ranging from "No Growth" to 42 colony forming units per cubic meter of air (cfu/m³). Indoor fungal concentrations were consistent with or below the outdoor concentrations, which were also low. *Stachybotrys chartarum* was isolated in six locations on the ninth floor. These locations included the Conference Room and Rooms 9182, 9112, 9180, 9110, 9180A, and 9201.

Stachybotrys was also isolated in Room 105 in Suite 110 of the Skyline IV building, which was sampled as a result of a specific water incursion event unrelated to the conditions on the ninth floor of Skyline V.

Other pathogenic fungi including several species of *Aspergillus* were also identified in several of the air sampling locations. These locations include the Conference Room, Rooms 9182, 9180, 9143, 638, 538-542 GME Room, 636, and locations in Suites 500 and 517. *Aspergillus niger* was also present in the sample collected outdoors.

Fungal wipe sampling results were generally low. Several pathogenic species of *Aspergillus* were isolated in samples collected on the fifth floor. Slightly elevated concentrations of fungi were measured in the air handling units (AHU) sampled (AHUs 1 and 2). These units serve the entire building. *Stachybotrys* was present in samples collected on the return air side of AHU 2. Other fungi, not normally present in indoor environments, were identified within both air handling units. The presence of these organisms indicates the need for cleaning and disinfection of these surfaces.

Active water leakage into the building was observed in isolated areas on the ninth floor during the survey.

SURVEY METHODOLOGY

Viable air sampling was performed in each office on the ninth floor of the building, and in representative locations on each other floor occupied by Government tenants. Air sampling was also performed in one location in the adjacent Skyline IV building. In addition to viable sampling, non-viable fungal spore sampling was performed in some ninth floor locations during the initial phase of the sampling. Fungal wipe sampling was performed in representative locations on each floor where air sampling was performed, and was also performed in several locations in AHUs 1 and 2.

Microbial air samples were collected using an N6 stage Andersen viable sieve impactor. Air was drawn through the impactor using a precalibrated GAST electric high-volume sampling pump at a rate of 28.3 liters per minute. Modified malt extract agar was used as a general fungal sampling medium, and Sabaraud Dextrose agar was used to sample specifically for *Stachybotrys*. Analyses of the microbial air samples were performed in accordance with standard medical/public health microbiological isolation and characterization techniques and NIOSH Method 501 (draft document). The samples were analyzed to identify the concentrations of viable bacterial and fungal organisms present in total colony forming units per cubic meter of air (cfu/m³).

The wipe samples were collected using *Culturette II* rayon-tipped sampling swabs and transport systems manufactured by Becton Dickinson Microbiology Systems. Each swab was used to wipe a known area of the surface to be sampled, and was then stored in a modified Stuart's bacterial transport medium during handling and transport to the laboratory. All samples were collected in accordance with protocols recognized by the American Conference of Governmental Industrial Hygienists (ACGIH), and were enumerated and identified using standard isolation and identification techniques. Sample results are provided as total counts of colony forming units (cfu) per square inch of surface area for the wipe sample.

Non-viable spore trap samples were collected in some ninth floor locations to determine the potential for non-viable fungal spores to contribute to allergic symptoms. Some fungal spores may be present in the air, but will not grow on culture media in the laboratory. Samples were collected using a battery-powered Burkard Personal Volumetric air sampler with an air flow rate of ten liters per minute. The sampler draws ambient air through the sampling chamber and deposits spores and other particles onto a glass slide treated with a petroleum-based adhesive. Samples were analyzed by direct microscopic examination, and were reported by genus and as a total, in spores per cubic meter of air.

Microbial samples were analyzed by Aerobiology Laboratory Associates, Inc., of Reston, Virginia.

SURVEY FINDINGS

The results of the sampling are provided in the data table included as Attachment A. Attachment B provides the laboratory data sheets. Brief descriptions of some common fungal organisms are provided for your reference as Attachment C.

General interpretation guidelines are provided below:

Microbial - General Guidelines

Microorganisms and other biological contaminants have been associated with various allergic responses including asthma attacks, hypersensitivity responses (hypersensitivity pneumonitis, humidifier fever, allergic rhinitis etc.) and illnesses such as legionellosis, Legionnaire's disease, and Pontiac Fever. Symptoms can include chills, fever, muscle aches, chest tightness, headache, cough, sore throat, diarrhea, and nausea. Sources of microbial contaminants can include air handling system condensate, cooling towers, water-damaged building materials, high indoor humidity, damp organic materials, and porous wet surfaces. The presence of moisture or water in combination with organic materials can support the growth of microorganisms. Microbial contamination within a building ventilation system is also of concern due to the potential for the system to circulate microorganisms to non-source areas (e.g., areas without water damage or reservoirs).

The ACGIH *Bioaerosols, Assessment and Control, 1999*, provides guidance on investigation, sampling, assessment, and remedial actions. This document identifies microorganisms currently associated with Building Related Illness (BRI), but does not provide any criteria for acceptable airborne concentrations or surface contamination levels. Emphasis is placed on identification of species, conditions found at the site, and symptoms reported by the affected individuals. "ACGIH does not support any existing numerical criteria for interpreting data on biological agents from source or air samples in non-manufacturing environments."

There are no federal OSHA standards regulating exposure to microorganisms in the work place. The OSHA *Technical Manual, Chapter 6 - Indoor Air Quality Investigation, issued by OSHA Instruction CPL-2-2.20B, CH-1, November 13, 1990*, provides a value of 1,000 viable cfu/m³, 1,000,000 cfu/gram of fungi in dust or material, and 10,000 cfu/milliliter of stagnant water or slime as contamination indicators.

It should be noted that levels in excess of these concentrations do not necessarily imply that the conditions are unsafe or hazardous. A determination of the types and concentrations of airborne microorganisms is necessary to fully evaluate the hazard to employees. However, as previously indicated, this level does not correlate directly with airborne levels that are of health concern because of the wide variety of microorganisms that can be found in buildings. In several cases where a large number of people have exhibited illnesses that were associated with microbial exposure, the levels of bacteria and fungi have usually been more than 2,000 cfu/m³ of air. It should be noted that during growing seasons, outdoor fungal spore levels can range from 1,000 cfu/m³ to 100,000 cfu/m³ of air.

No contamination indicator is provided for surface or wipe sampling concentrations. Wipe sampling is commonly performed to evaluate the degree of surface contamination. Although the analysis can be reported as a concentration, the result is generally considered an empirical or qualitative value. An affirmative outcome is simply an indicator that maintenance may be required to maintain surface cleanliness. There is no regulatory threshold for microbial wipe samples. Therefore, specific values should take into account sound professional judgment and recommended guidelines of research and public health institutions when evaluating the significance of the analytical results. Careful consideration should also be given when assessing the magnitude of the value, keeping in mind comparative outdoor species, contaminant dispersion, and the toxicity of the microorganism isolated.

Adverse health effects associated with exposure to microbial organisms are a function of many factors, of which concentration and the type of organism are major considerations. In most cases where the airborne concentration of viable microbes is low, adverse health consequences of exposure to bioaerosols are observed only in hypersensitive individuals, such as persons with known allergy histories, or in individuals with compromised immune systems. When present, the reactions of such individuals tend to become more severe with increasing exposure.

In assessing potential microbial exposures, it is important to note that individual microbial measurements provide a limited view of true exposure due to the fact that levels can fluctuate widely over time and under varying conditions. In addition, dead cells and cell fragments, proteins, metabolites and volatile organic compounds produced by microbes may also be responsible for adverse health effects.

Confirmation of actual health effects resulting from exposure to a microbial agent must be based on medical findings in conjunction with survey test results.

DISCUSSION AND RECOMMENDATIONS

The ninth floor air sampling results indicated several rooms where *Stachybotrys chartarum* was isolated. These rooms included the Conference Room and several rooms in the immediate vicinity. *Stachybotrys* was also isolated from the sample collected in Room 9201, which is also on the south side of the ninth floor, but is somewhat removed from the Conference Room area. Evidence of past water damage as well as active water incursion were observed during the sampling, and roof repairs were being performed simultaneously with the survey in an effort to prevent water from entering the building. Some water damaged building materials had been removed from the building, and others remained while the sampling was performed.

Aspergillus niger and *Aspergillus fumigatus* (opportunistic pathogens) were also observed in some of the samples collected from the ninth floor, sixth floor, and fifth floor, and may indicate amplification of these organisms in the locations sampled.

Wipe sampling generally indicated low surface concentrations. Samples collected within AHUs 1 and 2 were slightly elevated compared to the samples collected in other areas of the building. *Aspergillus niger* and *Stachybotrys* were isolated within AHU 2. Several of the other organisms isolated within the air handling units are not commonly isolated in indoor environments (nor in the HVAC components serving them) in the concentrations measured, and indicate the need for cleaning and disinfection of the surfaces sampled.

Based upon the sampling results and upon observations made while on-site, the following recommendations are provided:

1. The leaks in the building must be repaired to prevent future water incursion to minimize the potential for bioamplification.
2. Wet or previously wet porous materials that were not dried in a timely fashion (24 hours) should be removed and discarded. Non-porous surfaces and materials should be thoroughly cleaned and disinfected. Elevated airborne fungal concentrations may result once contaminated

Ms. Normajean P. Eleazer
March 13, 2000
Page 6

building materials are disturbed, and it is strongly recommended that an experienced microbial abatement contractor perform the remedial measures in this building.

3. Further investigation is warranted on the fifth and sixth floors due to the presence of several pathogenic species of *Aspergillus*.
4. Follow-up air and wipe sampling should be performed following remedial actions to assess their effectiveness in removing the target organisms.

Cost-effective remedial technologies are currently available through specialty contractors using proprietary anti-microbial agents. These products have been proven effective when applied properly in accordance with the manufacturers' recommendations. Additionally, some contractors will provide written warranties guaranteeing that microbial growth will not reoccur, provided that certain conditions are met and documented (e.g., no water intrusion into the space, etc.).

Consideration may be given to obtaining further information from prospective contractors regarding specific options applicable to the building and the conditions described in this report.

If you have any questions, or I may be of further assistance, please feel free to call.

Sincerely,

(b) (6)

Francis W. McGrail IV
Division Manager
Indoor Air Quality Services

Ref. No: 1046-99-0604

ATTACHMENT A

Laboratory Results Data Table



GENERAL SERVICES ADMINISTRATION

Microbial Sampling Results

Skyline V Building
5111 Leesburg Pike
Falls Church, Virginia

Sampling Location	Sample Type	Result	Organisms Isolated
JASD000131-1 Ninth floor, conference room	Air, Total Fungal Count w/ Ids	24 cfu/m ³	Rhizopus species (50%) Cladosporium species (50%)
JASD000131-1 Ninth floor, conference room	Air, Stachybotrys Culture	24 cfu/m ³	Stachybotrys chartarum (atra) (50%) Aspergillus niger (25%)
JASD000131-1 Ninth floor, conference room	Non-viable, Spore Trap Analysis	Total spores = 66	Cladosporium (11) Basidiospores (11) Unknown (44)
JASD000131-2 Ninth Floor, Room 9182	Air, Total Fungal Count w/ Ids	36 cfu/m ³	Penicillium species (50%) Aspergillus niger (17%)
JASD000131-2 Ninth Floor, Room 9182	Air, Stachybotrys Culture	30 cfu/m ³	Stachybotrys chartarum (atra) (40%) Penicillium species (40%)
JASD000131-2 Ninth Floor, Room 9182	Non-viable, Spore Trap Analysis	Total spores = 77	Ascospores (11) Smuts, Periconia, Myxomycetes (11) Unknown (44) Hyphal Elements (11)
JASD000131-3 Ninth floor, Room 9113	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASD000131-3 Ninth floor, Room 9113	Air, Stachybotrys Culture	24 cfu/m ³	Penicillium species (50%) Yeast (25%)
JASD000131-3 Ninth floor, Room 9113	Non-viable, Spore Trap Analysis	Total spores = 11	Unknown (11)
JASD000131-4 Ninth floor, Room 9112	Air, Total Fungal Count w/ Ids	18 cfu/m ³	Penicillium species (33%) Cladosporium species (33%)
JASD000131-4 Ninth floor, Room 9112	Air, Stachybotrys Culture	18 cfu/m ³	Penicillium species (67%) Cladosporium species (33%)
JASD000131-4 Ninth floor, Room 9112	Non-viable, Spore Trap Analysis	Total spores = 66	Ascospores (22) Smuts, Periconia, Myxomycetes (11) Stachybotrys (22) Epicoccum (11)
JASD000131-5 Ninth floor, office at north end of corridor from conference room	Air, Total Fungal Count w/ Ids	6 cfu/m ³	Cladosporium species (100%)

Sample ID	Sample Description	Sample Type	Count	Results
JASD000131-5	Ninth floor, office at north end of corridor from conference room	Air, Stachybotrys Culture	18 cfu/m ³	Yeast (67%) Cladosporium species (33%)
JASD000131-5	Ninth floor, office at north end of corridor from conference room	Non-viable, Spore Trap Analysis	Total spores = 44	Cladosporium (11) Smuts, Periconia, Myxomycetes (11) Penicillium/Aspergillus group (11) Pestalotia (11)
JASD000131-6	Outside	Air, Total Fungal Count w/ Ids	66 cfu/m ³	Cladosporium species (27%) Penicillium species (18%)
JASD000131-6	Outside	Air, Stachybotrys Culture	66 cfu/m ³	Sterilia mycelia (45%) Penicillium species (18%)
JASD000131-6	Outside	Non-viable, Spore Trap Analysis	Total spores = 330	Smuts, Periconia, Myxomycetes (22) Penicillium/Aspergillus group (11) Pollen grains (22) Unknown (253) Hyphal elements (22)
JASD000131-7	Blank	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASD000131-7	Blank	Air, Stachybotrys Culture	No Growth	N/A
JASK000201-1	Ninth floor, Room 9180	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Aspergillus niger (50%) Penicillium species (50%)
JASK000201-1	Ninth floor, Room 9180	Air, Stachybotrys culture	7 cfu/m ³	Stachybotrys chartarum (atra) (100%)
JASK000201-2	Ninth floor, Room 9114	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Cladosporium species (34%) Phoma species (33%) Sterilia mycelia (33%)
JASK000201-2	Ninth floor, Room 9114	Air, Stachybotrys culture	42 cfu/m ³	Cladosporium species (33%) Drechslera species (17%) Penicillium species (17%) Phoma species (17%) Acremonium (Cephalosporium) species (16%)
JASK000201-3	Ninth floor, Room 9115	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aspergillus ochraceous (100%)
JASK000201-3	Ninth floor, Room 9115	Air, Stachybotrys culture	No Growth	N/A
JASK000201-4	Ninth floor, Room 9111	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-4	Ninth floor, Room 9111	Air, Stachybotrys culture	No Growth	N/A

Sample ID	Sample Description	Count	Results
JASK000201-5 Ninth floor, Room 9116	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Penicillium species (100%)
JASK000201-5 Ninth floor, Room 9116	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (100%)
JASK000201-6 Ninth floor, Room 9110	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-6 Ninth floor, Room 9110	Air, Stachybotrys culture	7 cfu/m³	Stachybotrys chartarum (atra) (100%)
JASK000201-7 Ninth floor, Room 9117	Air, Total Fungal Count w/ Ids	35 cfu/m ³	Penicillium species (40%) Aspergillus species (20%) Scopulariopsis candidus (20%) Sterilia mycelia (20%)
JASK000201-7 Ninth floor, Room 9117	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000201-8 Ninth floor, Room 9109	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Cladosporium species (100%)
JASK000201-8 Ninth floor, Room 9109	Air, Stachybotrys culture	7 cfu/m ³	Aspergillus species (100%)
JASK000201-9 Ninth floor, Room 9118	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-9 Ninth floor, Room 9118	Air, Stachybotrys culture	No Growth	N/A
JASK000201-10 Ninth floor, Room 9117A	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-10 Ninth floor, Room 9117A	Air, Stachybotrys culture	No Growth	N/A
JASK000201-11 Ninth floor, Room 9108A	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-11 Ninth floor, Room 9108A	Air, Stachybotrys culture	14 cfu/m ³	Alternaria species (50%) Sterilia mycelia (50%)
JASK000201-12 Ninth floor, Room 9107	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aspergillus ochraceous (100%)
JASK000201-12 Ninth floor, Room 9107	Air, Stachybotrys culture	No Growth	N/A

JASK000201-13 Ninth floor, Room 9180A	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Sterilia mycelia (66%) Aspergillus ochraceous (34%)
JASK000201-13 Ninth floor, Room 9180A	Air, Stachybotrys culture	28 cfu/m ³	Stachybotrys chartarum (atra) (75%) Penicillium species (25%)
JASK000201-14 Ninth floor, Room 9179	Air, Total Fungal Count w/ Ids	35 cfu/m ³	Penicillium species (60%) Cladosporium species (40%)
JASK000201-14 Ninth floor, Room 9179	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000201-15 Ninth floor, Room 9183	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Heteroconium species (100%)
JASK000201-15 Ninth floor, Room 9183	Air, Stachybotrys culture	14 cfu/m ³	Cladosporium species (50%) Penicillium species (50%)
JASK000201-16 Ninth floor, Room 9186	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Aureobasidium species (34%) Streptomyces species (33%) Heteroconium species (33%)
JASK000201-16 Ninth floor, Room 9186	Air, Stachybotrys culture	No Growth	N/A
JASK000201-17 Ninth floor, Room 9187A	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Penicillium species (100%)
JASK000201-17 Ninth floor, Room 9187A	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000201-18 Ninth floor, Room 9178	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Cladosporium species (100%)
JASK000201-18 Ninth floor, Room 9178	Air, Stachybotrys culture	7 cfu/m ³	Streptomyces species (100%)
JASK000201-19 Ninth floor, Room 9177	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Arthrimum species (50%) Penicillium species (50%)
JASK000201-19 Ninth floor, Room 9177	Air, Stachybotrys culture	No Growth	N/A
JASK000201-20 Ninth floor, Room 9178B	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Heteroconium species (50%) Verticillium species (50%)
JASK000201-20 Ninth floor, Room 9178B	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000201-21 Ninth floor, Room 9188	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Verticillium species (34%) Sterilia mycelia (33%) Heteroconium species (33%)

Sample ID	Sample Description	Results	Interpretation
JASK000201-21 Ninth floor, Room 9188	Air, Stachybotrys culture	No Growth	N/A
JASK000201-22 Ninth floor, Room 9176	Air, Total Fungal Count w/ lds	7 cfu/m ³	Heteroconium species (100%)
JASK000201-22 Ninth floor, Room 9176	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000201-23 Ninth floor, Room 9189	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000201-23 Ninth floor, Room 9189	Air, Stachybotrys culture	No Growth	N/A
JASK000201-24 Ninth floor, Room 9175	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000201-24 Ninth floor, Room 9175	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Aspergillus species (50%)
JASK000201-25 Ninth floor, Room 9106	Air, Total Fungal Count w/ lds	7 cfu/m ³	Aspergillus species (100%)
JASK000201-25 Ninth floor, Room 9106	Air, Stachybotrys culture	No Growth	N/A
JASK000201-26 Ninth floor, Room 9103	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000201-26 Ninth floor, Room 9103	Air, Stachybotrys culture	7 cfu/m ³	Streptomyces species (100%)
JASK000201-27 Ninth floor, Room 9104	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000201-27 Ninth floor, Room 9104	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000201-28 Outside	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000201-28 Outside	Air, Stachybotrys culture	14 cfu/m ³	Cladosporium species (100%)
JASK000201-29 Ninth floor, Room 9105	Air, Total Fungal Count w/ lds	7 cfu/m ³	Penicillium species (100%)
JASK000201-29 Ninth floor, Room 9105	Air, Stachybotrys culture	No Growth	N/A

Sample Location	Sample Type	Count	Organism(s) Identified
JASK000201-30 Ninth floor, Room 9102	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Streptomyces species (100%)
JASK000201-30 Ninth floor, Room 9102	Air, Stachybotrys culture	7 cfu/m ³	Streptomyces species (100%)
JASK000201-31 Ninth floor, Room 9190	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)
JASK000201-31 Ninth floor, Room 9190	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000201-32 Ninth floor, Room 9192	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Sterilia mycelia (50%) Heteroconium species (50%)
JASK000201-32 Ninth floor, Room 9192	Air, Stachybotrys culture	No Growth	N/A
JASK000201-33 Ninth floor, Room 9174	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Cladosporium species (100%)
JASK000201-33 Ninth floor, Room 9174	Air, Stachybotrys culture	No Growth	N/A
JASK000201-34 Ninth floor, Room 9191	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Aspergillus species (50%) Black yeast (50%)
JASK000201-34 Ninth floor, Room 9191	Air, Stachybotrys culture	No Growth	N/A
JASK000201-35 Ninth floor, Room 9193	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Heteroconium species (100%)
JASK000201-35 Ninth floor, Room 9193	Air, Stachybotrys culture	No Growth	N/A
JASK000201-36 Ninth floor, Room 9194	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-36 Ninth floor, Room 9194	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000201-37 Ninth floor, Room 9101	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-37 Ninth floor, Room 9101	Air, Stachybotrys culture	7 cfu/m ³	Alternaria species (100%)
JASK000202-1 Ninth floor, Room 9100	Air, Total Fungal Count w/ Ids	No Growth	N/A

Sample Location	Sample Type	Result	Interpretation
JASK000202-1 Ninth floor, Room 9100	Air, Stachybotrys culture	No Growth	N/A
JASK000202-2 Ninth floor, Room 9099	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-2 Ninth floor, Room 9099	Air, Stachybotrys culture	No Growth	N/A
JASK000202-3 Ninth floor, Room 9098	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-3 Ninth floor, Room 9098	Air, Stachybotrys culture	No Growth	N/A
JASK000202-4 Ninth floor, Room 9094	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-4 Ninth floor, Room 9094	Air, Stachybotrys culture	No Growth	N/A
JASK000202-5 Ninth floor, Room 9095	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-5 Ninth floor, Room 9095	Air, Stachybotrys culture	No Growth	N/A
JASK000202-6 Ninth floor, Room 9097	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-6 Ninth floor, Room 9097	Air, Stachybotrys culture	No Growth	N/A
JASK000202-7 Ninth floor, Room 9096	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Streptomyces species (100%)
JASK000202-7 Ninth floor, Room 9096	Air, Stachybotrys culture	No Growth	N/A
JASK000202-8 Ninth floor, Room 9093	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-8 Ninth floor, Room 9093	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000202-9 Ninth floor, Room 9119	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-9 Ninth floor, Room 9119	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)

Sample Location	Sample Type	Count	Organism(s)
JASK000202-10 Ninth floor, Room 9121	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000202-10 Ninth floor, Room 9121	Air, Stachybotrys culture	14 cfu/m ³	Aspergillus species (50%) Sterilia mycelia (50%)
JASK000202-11 Ninth floor, Room 9120	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-11 Ninth floor, Room 9120	Air, Stachybotrys culture	No Growth	N/A
JASK000202-12 Ninth floor, Room 9122	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-12 Ninth floor, Room 9122	Air, Stachybotrys culture	7 cfu/m ³	Cladosporium species (100%)
JASK000202-13 Ninth floor, Room 9124	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-13 Ninth floor, Room 9124	Air, Stachybotrys culture	No Growth	N/A
JASK000202-14 Ninth floor, Room 9127	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Paecilomyces inflatus (100%)
JASK000202-14 Ninth floor, Room 9127	Air, Stachybotrys culture	No Growth	N/A
JASK000202-15 Ninth floor, Room 9128	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-15 Ninth floor, Room 9128	Air, Stachybotrys culture	No Growth	N/A
JASK000202-16 Outside	Air, Total Fungal Count w/ Ids	28 cfu/m ³	Sterilia mycelia (100%)
JASK000202-16 Outside	Air, Stachybotrys culture	21 cfu/m ³	Sterilia mycelia (34%) Cladosporium species (33%) Yeast (33%)
JASK000202-17 Ninth floor, Room 9131	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-17 Ninth floor, Room 9131	Air, Stachybotrys culture	No Growth	N/A
JASK000202-18 Ninth floor, Room 9126	Air, Total Fungal Count w/ Ids	No Growth	N/A

Sample ID	Sample Description	Result	Organisms Isolated
JASK000202-18 Ninth floor, Room 9126	Air, Stachybotrys culture	No Growth	N/A
JASK000202-19 Ninth floor, Room 9123	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-19 Ninth floor, Room 9123	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000202-20 Ninth floor, Room 9136A	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-20 Ninth floor, Room 9136A	Air, Stachybotrys culture	No Growth	N/A
JASK000202-21 Ninth floor, Room 9130	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-21 Ninth floor, Room 9130	Air, Stachybotrys culture	No Growth	N/A
JASK000202-22 Ninth floor, Room 9195	Air, Total Fungal Count w/ Ids	Quantitation not possible.	Confluent growth of Trichoderma species noted.
JASK000202-22 Ninth floor, Room 9195	Air, Stachybotrys culture	7 cfu/m ³	Cladosporium species (100%)
JASK000202-23 Ninth floor, Room 9196	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Heteroconium species (100%)
JASK000202-23 Ninth floor, Room 9196	Air, Stachybotrys culture	7 cfu/m ³	Heteroconium species (100%)
JASK000202-24 Ninth floor, Room 9197	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-24 Ninth floor, Room 9197	Air, Stachybotrys culture	No Growth	N/A
JASK000202-25 Ninth floor, Room 9198	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Paecilomyces species (100%)
JASK000202-25 Ninth floor, Room 9198	Air, Stachybotrys culture	14 cfu/m ³	Aspergillus species (50%) Sterilia mycelia (50%)
JASK000202-26 Ninth floor, Room 9199	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-26 Ninth floor, Room 9199	Air, Stachybotrys culture	No Growth	N/A

Sample Location	Sample Type	Result	Organisms Isolated
JASK000202-27 Ninth floor, Room 9201	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aspergillus species (100%)
JASK000202-27 Ninth floor, Room 9201	Air, Stachybotrys culture	7 cfu/m ³	Stachybotrys chartarum (atra) (100%)
JASK000202-28 Ninth floor, Room 9201A	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Cladosporium species (34%) Yeast (33%) Sterilia mycelia (33%)
JASK000202-28 Ninth floor, Room 9201A	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000202-29 Ninth floor, Room 9202	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-29 Ninth floor, Room 9202	Air, Stachybotrys culture	7 cfu/m ³	Yeast (100%)
JASK000202-30 Ninth floor, Room 9203	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Cladosporium species (50%) Sterilia mycelia (50%)
JASK000202-30 Ninth floor, Room 9203	Air, Stachybotrys culture	No Growth	N/A
JASK000202-31 Ninth floor, Room 9204	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Alternaria species (50%) Aspergillus ochraceous (50%)
JASK000202-31 Ninth floor, Room 9204	Air, Stachybotrys culture	No Growth	N/A
JASK000202-32 Ninth floor, Room 9205	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-32 Ninth floor, Room 9205	Air, Stachybotrys culture	No Growth	N/A
JASK000202-33 Ninth floor, Room 9206	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Cladosporium species (34%) Aspergillus species (33%) Heteroconium species (33%)
JASK000202-33 Ninth floor, Room 9206	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000202-34 Ninth floor, Room 9207	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aureobasidium species (100%)
JASK000202-34 Ninth floor, Room 9207	Air, Stachybotrys culture	No Growth	N/A
JASK000202-35 Ninth floor, Room 9208	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)

Sample ID	Sample Type	Count	Organism(s)
JASK000202-35 Ninth floor, Room 9208	Air, Stachybotrys culture	7 cfu/m ³	Paecilomyces species (100%)
JASK000202-36 Ninth floor, Room 9209	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-36 Ninth floor, Room 9209	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (100%)
JASK000202-37 Ninth floor, Room 9173	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-37 Ninth floor, Room 9173	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (100%)
JASK000202-38 Ninth floor, Room 9169	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000202-38 Ninth floor, Room 9169	Air, Stachybotrys culture	7 cfu/m ³	Cladosporium species (100%)
JASK000202-39 Ninth floor, Room 9170	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-39 Ninth floor, Room 9170	Air, Stachybotrys culture	No Growth	N/A
JASK000203-1 Ninth floor, Room 9129	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Chrysosporium species (100%)
JASK000203-1 Ninth floor, Room 9129	Air, Stachybotrys culture	14 cfu/m ³	Aspergillus species (50%) Sterilia mycelia (50%)
JASK000203-2 Ninth floor, Room 9132	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Chrysosporium species (100%)
JASK000203-2 Ninth floor, Room 9132	Air, Stachybotrys culture	No Growth	N/A
JASK000203-3 Ninth floor, Room 9133	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000203-3 Ninth floor, Room 9133	Air, Stachybotrys culture	14 cfu/m ³	Botrytis species (50%) Sterilia mycelia (50%)
JASK000203-4 Ninth floor, Room 9134	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Botrytis (100%)
JASK000203-4 Ninth floor, Room 9134	Air, Stachybotrys culture	No Growth	N/A

Sample ID	Sample Description	Result	Organism(s)
JASK000203-5 Ninth floor, Room 9135	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000203-5 Ninth floor, Room 9135	Air, Stachybotrys culture	7 cfu/m ³	Paecilomyces inflatus (100%)
JASK000203-6 Ninth floor, Room 9136B	Air, Total Fungal Count w/ lds	7 cfu/m ³	Sterilia mycelia (100%)
JASK000203-6 Ninth floor, Room 9136B	Air, Stachybotrys culture	No Growth	N/A
JASK000203-7 Ninth floor, Room 9136	Air, Total Fungal Count w/ lds	14 cfu/m ³	Cladosporium species (50%) Sterilia mycelia (50%)
JASK000203-7 Ninth floor, Room 9136	Air, Stachybotrys culture	15 cfu/m ³	Aspergillus species (100%)
JASK000203-8 Ninth floor, Room 9137	Air, Total Fungal Count w/ lds	7 cfu/m ³	Botrytis species (100%)
JASK000203-8 Ninth floor, Room 9137	Air, Stachybotrys culture	7 cfu/m ³	Cladosporium species (100%)
JASK000203-9 Ninth floor, Room 9136C	Air, Total Fungal Count w/ lds	21 cfu/m ³	Aspergillus species (66%) Sterilia mycelia (34%)
JASK000203-9 Ninth floor, Room 9136C	Air, Stachybotrys culture	21 cfu/m ³	Aspergillus species (34%) Paecilomyces inflatus (33%) Sterilia mycelia (33%)
JASK000203-10 Ninth floor, Room 9138	Air, Total Fungal Count w/ lds	42 cfu/m ³	Penicillium species (67%) Aspergillus species (17%) Paecilomyces species (16%)
JASK000203-10 Ninth floor, Room 9138	Air, Stachybotrys culture	No Growth	N/A
JASK000203-11 Ninth floor, Room 9139	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000203-11 Ninth floor, Room 9139	Air, Stachybotrys culture	No Growth	N/A
JASK000203-12 Ninth floor, Room 9140	Air, Total Fungal Count w/ lds	21 cfu/m ³	Penicillium species (66%) Paecilomyces species (34%)
JASK000203-12 Ninth floor, Room 9140	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (100%)
JASK000203-13 Ninth floor, Room 9141	Air, Total Fungal Count w/ lds	14 cfu/m ³	Penicillium species (50%) Aspergillus species (50%)

JASK000203-13 Ninth floor, Room 9141	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Streptomyces species (50%)
JASK000203-14 Ninth floor, Room 9142	Air, Total Fungal Count w/ lds	14 cfu/m ³	Aspergillus species (50%) Sterilia mycelia (50%)
JASK000203-14 Ninth floor, Room 9142	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000203-15 Ninth floor, Room 9143	Air, Total Fungal Count w/ lds	21 cfu/m ³	Cladosporium species (34%) Aspergillus niger (33%) Penicillium species (33%)
JASK000203-15 Ninth floor, Room 9143	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Aspergillus species (50%)
JASK000203-16 Ninth floor, Room 9144	Air, Total Fungal Count w/ lds	14 cfu/m ³	Penicillium species (100%)
JASK000203-16 Ninth floor, Room 9144	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Cladosporium species (50%)
JASK000203-17 Ninth floor, Room 9145	Air, Total Fungal Count w/ lds	7 cfu/m ³	Penicillium species (100%)
JASK000203-17 Ninth floor, Room 9145	Air, Stachybotrys culture	7 cfu/m ³	Paecilomyces species (100%)
JASK000203-18 Ninth floor, Room 9147	Air, Total Fungal Count w/ lds	7 cfu/m ³	Sterilia mycelia (100%)
JASK000203-18 Ninth floor, Room 9147	Air, Stachybotrys culture	No Growth	N/A
JASK000203-19 Ninth floor, Room 9167	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000203-19 Ninth floor, Room 9167	Air, Stachybotrys culture	1 cfu/m ³	Sterilia mycelia (100%)
JASK000203-20 Ninth floor, Room 9171	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000203-20 Ninth floor, Room 9171	Air, Stachybotrys culture	No Growth	N/A
JASK000203-21 Ninth floor, Room 9172	Air, Total Fungal Count w/ lds	7 cfu/m ³	Penicillium species (100%)
JASK000203-21 Ninth floor, Room 9172	Air, Stachybotrys culture	No Growth	N/A

JASK000203-22 Ninth floor, Room 9158	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Heteroconium species (100%)
JASK000203-22 Ninth floor, Room 9158	Air, Stachybotrys culture	No Growth	N/A
JASK000203-23 Ninth floor, Room 9165	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-23 Ninth floor, Room 9165	Air, Stachybotrys culture	No Growth	N/A
JASK000203-24 Ninth floor, Room 9157	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-24 Ninth floor, Room 9157	Air, Stachybotrys culture	1 cfu/m ³	Sterilia mycelia (100%)
JASK000203-25 Ninth floor, Room 9164	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Botrytis species (100%)
JASK000203-25 Ninth floor, Room 9164	Air, Stachybotrys culture	No Growth	N/A
JASK000203-26 Ninth floor, Room 9163	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-26 Ninth floor, Room 9163	Air, Stachybotrys culture	No Growth	N/A
JASK000203-27 Ninth floor, Room 9162	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-27 Ninth floor, Room 9162	Air, Stachybotrys culture	No Growth	N/A
JASK000203-28 Ninth floor, Room 9156	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-28 Ninth floor, Room 9156	Air, Stachybotrys culture	No Growth	N/A
JASK000203-29 Outside air, roof	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Aspergillus species (100%)
JASK000203-29 Outside air, roof	Air, Stachybotrys culture	91 cfu/m ³	Penicillium species (38%) Aspergillus species (31%) Phoma species (8%) Paecilomyces species (8%) Cladosporium species (8%)

Sample ID, Room		Description, Results	
JASK000203-30 Ninth floor, Room 9152	Air, Total Fungal Count w/ lds	7 cfu/m ³	Heteroconium species (100%)
JASK000203-30 Ninth floor, Room 9152	Air, Stachybotrys culture	35 cfu/m ³	Penicillium species (100%)
JASK000203-31 Ninth floor, Room 9154	Air, Total Fungal Count w/ lds	7 cfu/m ³	Cladosporium species (100%)
JASK000203-31 Ninth floor, Room 9154	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Alternaria species (50%)
JASK000203-32 Ninth floor, Room 9151	Air, Total Fungal Count w/ lds	21 cfu/m ³	Penicillium species (67%) Paecilomyces specires (33%)
JASK000203-32 Ninth floor, Room 9151	Air, Stachybotrys culture	7 cfu/m ³	Aspergillus species (100%)
JASK000203-33 Ninth floor, Room 9150	Air, Total Fungal Count w/ lds	21 cfu/m ³	Penicillium species (67%) Sterilia mycelia (33%)
JASK000203-33 Ninth floor, Room 9150	Air, Stachybotrys culture	14 cfu/m ³	Sterilia mycelia (100%)
JASK000203-34 Ninth floor, Room 9148	Air, Total Fungal Count w/ lds	21 cfu/m ³	Streptomyces species (67%) Sterilia mycelia (33%)
JASK000203-34 Ninth floor, Room 9148	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000203-35 Ninth floor, Room 9149	Air, Total Fungal Count w/ lds	21 cfu/m ³	Sterilia mycelia (100%)
JASK000203-35 Ninth floor, Room 9149	Air, Stachybotrys culture	No Growth	N/A
JASK000203-36 Ninth floor, Room 9146	Air, Total Fungal Count w/ lds	7 cfu/m ³	Penicillium species (100%)
JASK000203-36 Ninth floor, Room 9146	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000203-37 Ninth floor, Room 9173, beneath wallpaper, west window	Wipe, Total Fungal Count w/ lds	20 cfu/in ²	Penicillium species (100%)
JASK000203-37 Ninth floor, Room 9173, beneath wallpaper, west window	Wipe, Stachybotrys Culture and Total Fungal Count	20 cfu/in ²	Heteroconium species (100%)

JASK000203-38 Ninth floor, Room 9173, on concrete floor, beneath carpet	Wipe, Total Fungal Count w/ Ids	40 cfu/in ²	Penicillium species (67%) Paecilomyces species (33%)
JASK000203-38 Ninth floor, Room 9173, on concrete floor, beneath carpet	Wipe, Stachybotrys Culture and Total Fungal Count	10 cfu/in ²	Penicillium species (100%)
JASK000204-1 Sixth floor, Suite 602, entrance to Mr. Riethey's office	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Penicillium species (34%) Chrysosporium species (33%) Sterilia mycelia (33%)
JASK000204-1 Sixth floor, Suite 602, entrance to Mr. Riethey's office	Air, Stachybotrys culture	No Growth	N/A
JASK000204-2 Sixth floor, Suite 601, open area near Waiter's Club	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aspergillus niger (100%)
JASK000204-2 Sixth floor, Suite 601, open area near Waiter's Club	Air, Stachybotrys Culture	21 cfu/m ³	Penicillium species (34%) Chrysosporium species (33%) Sterilia mycelia (33%)
JASK000204-3 Sixth floor, Suite 601, Y. Askew's cubicle	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000204-3 Sixth floor, Suite 601, Y. Askew's cubicle	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000204-4 Fourth floor, Suite 403, E. Forbes' office	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Chrysosporium species (100%)
JASK000204-4 Fourth floor, Suite 403, E. Forbes' office	Air, Stachybotrys Culture	21 cfu/m ³	Sterilia mycelia (100%)
JASK000204-5 Fourth floor, Suite 401, hall at Pepsi machine	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)
JASK000204-5 Fourth floor, Suite 401, hall at Pepsi machine	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-6 Eighth floor, Suite 810, reception area of L. DeLoach	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000204-6 Eighth floor, Suite 810, reception area of L. DeLoach	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-7 Eighth floor, Suite 810, Room 8008	Air, Total Fungal Count w/ Ids	28 cfu/m ³	Penicillium species (50%) Chrysosporium species (50%)
JASK000204-7 Eighth floor, Suite 810, Room 8008	Air, Stachybotrys Culture	7 cfu/m ³	Sterilia mycelia (100%)

Sample ID	Location	Method	Result	Findings
JASK000204-8	Eighth floor, Suite 808, reception area at E. Hemsath's office	Air, Total Fungal Count w/ lds	7 cfu/m ³	Black yeast (100%)
JASK000204-8	Eighth floor, Suite 808, reception area at E. Hemsath's office	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-13	Ninth floor, Room 9053	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000204-13	Ninth floor, Room 9053	Air, Stachybotrys Culture	7 cfu/m ³	Penicillium species (100%)
JASK000204-14	Ninth floor, Room 9161	Air, Total Fungal Count w/ lds	28 cfu/m ³	Penicillium species (50%) Chaetomium species (25%) Black yeast (10%)
JASK000204-14	Ninth floor, Room 9161	Air, Stachybotrys Culture	70 cfu/m ³	Penicillium species (70%) Paecilomyces species (20%) Sterilia myelia (10%)
JASK000204-15	First floor, Suite 103 (BC2A Program Office), Room 150	Air, Total Fungal Count w/ lds	14 cfu/m ³	Penicillium species (100%)
JASK000204-15	First floor, Suite 103 (BC2A Program Office), Room 150	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-16	First floor, Suite 105 (DISA Counter Drug Office)	Air, Total Fungal Count w/ lds	150 cfu/m ³	Penicillium species (95%) Cladosporium species (5%)
JASK000204-16	First floor, Suite 105 (DISA Counter Drug Office)	Air, Stachybotrys Culture	98 cfu/m ³	Penicillium species (79%) Cladosporium species (7%) Rhodotorula species (7%) Yeast (7%)
JASK000204-17	First floor, Suite 107 (SSO), open area, center	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000204-17	First floor, Suite 107 (SSO), open area, center	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-18	First floor, Suite 100 (Security), Room 107	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000204-18	First floor, Suite 100 (Security), Room 107	Air, Stachybotrys Culture	7 cfu/m ³	Alternaria species (100%)
JASK000204-19	Sixth floor, Suite 602, Mr. Cole's desk	Air, Total Fungal Count w/ lds	7 cfu/m ³	Cladosporium species (100%)
JASK000204-19	Sixth floor, Suite 602, Mr. Cole's desk	Air, Stachybotrys Culture	14 cfu/m ³	Sterilia mycelia (50%) Alternaria species (50%)

Sample ID	Location	Method	Results
JASK000204-20	Fourth floor, Suite 400, M. Brayleih's cubicle	Air, Total Fungal Count w/ Ids	No Growth
JASK000204-20	Fourth floor, Suite 400, M. Brayleih's cubicle	Air, Stachybotrys Culture	14 cfu/m ³ Penicillium species (50%) Alternaria species (50%)
JASK000204-21	Fourth floor, Suite 400, M. Maloney's office	Air, Total Fungal Count w/ Ids	No Growth
JASK000204-21	Fourth floor, Suite 400, M. Maloney's office	Air, Stachybotrys Culture	7 cfu/m ³ Sterilia mycelia (100%)
JASK000204-22	Fourth floor, Suite 404, Room 470, rear	Air, Stachybotrys Culture	No Growth
JASK000204-22	Fourth floor, Suite 404, Room 470, rear	Air, Total Fungal Count w/ Ids	No Growth
JASK000204-23	Outside air, roof	Air, Stachybotrys Culture	No Growth
JASK000204-23	Outside air, roof	Air, Total Fungal Count w/ Ids	14 cfu/m ³ Penicillium species (50%) Sterilia mycelia (50%)
JASK000209-01	Sixth floor, Suite 624, Room 635	Air, Stachybotrys Culture	110 cfu/m ³ Penicillium species (100%)
JASK000209-01	Sixth floor, Suite 624, Room 635	Air, Stachybotrys Culture	14 cfu/m ³ Penicillium species (50%) Sterilia mycelia (50%)
JASK000209-02	Sixth floor, Suite 624, reception area, Room 650	Air, Total Fungal Count w/ Ids	7 cfu/m ³ Sterilia mycelia (100%)
JASK000209-02	Sixth floor, Suite 624, reception area, Room 650	Air, Stachybotrys Culture	21 cfu/m ³ Penicillium species (67%) Cladosporium species (33%)
JASK000209-03	Sixth floor, Suite 638-640, Room 638, reception	Air, Total Fungal Count w/ Ids	49 cfu/m ³ Aspergillus fumigatus (72%) Penicillium species (14%) Cladosporium species (14%)
JASK000209-03	Sixth floor, Suite 638-640, Room 638, reception	Air, Stachybotrys Culture	42 cfu/m ³ Aspergillus fumigatus (67%) Cladosporium species (33%)
JASK000209-04	Fifth floor, Suite 538-542, Sam Brown's office, Room 539	Air, Total Fungal Count w/ Ids	21 cfu/m ³ Aspergillus species (67%) Penicillium species (33%)
JASK000209-04	Fifth floor, Suite 538-542, Sam Brown's office, Room 539	Air, Stachybotrys Culture	28 cfu/m ³ Aspergillus species (75%) Cladosporium species (25%)
JASK000209-05	Fifth floor, Suite 538-542, GME room	Air, Total Fungal Count w/ Ids	21 cfu/m ³ Penicillium species (50%) Paecilomyces species (25%) Aspergillus fumigatus (25%)

JASK000209-05 Fifth floor, Suite 538-542, GME room	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (50%) Aspergillus fumigatus (50%)
JASK000209-06 Sixth floor, Suite 638-640, Room 636	Air, Total Fungal Count w/ lds	14 cfu/m ³	Aspergillus fumigatus (50%) Sterilia mycelia (50%)
JASK000209-06 Sixth floor, Suite 638-640, Room 636	Air, Stachybotrys Culture	14 cfu/m ³	Aspergillus fumigatus (50%) Cladosporium species (50%)
JASK000209-07 Skyline IV, first floor, Suite 110, Room 105, Karen Brown's office	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000209-07 Skyline IV, first floor, Suite 110, Room 105, Karen Brown's office	Air, Stachybotrys Culture	7 cfu/m ³	Stachybotrys chartarum (atra) (100%)
JASK000209-13 Fifth floor, Randall Koran's office, Suite 550-559	Air, Total Fungal Count w/ lds	21 cfu/m ³	Penicillium species (67%) Sterilia mycelia (33%)
JASK000209-13 Fifth floor, Randall Koran's office, Suite 550-559	Air, Stachybotrys Culture	42 cfu/m ³	Penicillium species (66%) Cladosporium species (17%) Sterilia mycelia (17%)
JASK000209-14 Fifth floor, Sherrell Kern's cubicle, Suite 550-559	Air, Total Fungal Count w/ lds	Unable to quantitate due to nature of mucoraceous organism.	Penicillium species Rhizopus species
JASK000209-14 Fifth floor, Sherrell Kern's cubicle, Suite 550-559	Air, Stachybotrys Culture	Unable to quantitate due to nature of mucoraceous organism.	Penicillium species (75%) Rhizopus species (25%)
JASK000209-15 Fifth floor, Lt. Colonel Teresa Somnese, Suite 550-559	Air, Total Fungal Count w/ lds	21 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000209-15 Fifth floor, Lt. Colonel Teresa Somnese, Suite 550-559	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000209-16 Fifth floor, Suite 517, Sonya Mercurius	Air, Total Fungal Count w/ lds	98 cfu/m ³	Aspergillus fumigatus (79%) Penicillium species (7%) Pithomyces species (7%) Sterilia mycelia (7%)
JASK000209-16 Fifth floor, Suite 517, Sonya Mercurius	Air, Stachybotrys Culture	14 cfu/m ³	Aspergillus fumigatus (50%) Alternaria species (50%)
JASK000209-17 Fifth floor, Suite 517, Mark McKenzie	Air, Total Fungal Count w/ lds	42 cfu/m ³	Penicillium species (34%) Aspergillus fumigatus (33%) Sterilia mycelia (33%)
JASK000209-17 Fifth floor, Suite 517, Mark McKenzie	Air, Stachybotrys Culture	28 cfu/m ³	Aspergillus fumigatus (75%) Penicillium species (25%)
JASK000209-18 Fifth floor, Suite 500, M. Graves' cubicle	Air, Total Fungal Count w/ lds	7 cfu/m ³	Aspergillus fumigatus (100%)

JASK000209-18 Fifth floor, Suite 500, M. Graves' cubicle	Air, Stachybotrys Culture	7 cfu/m ³	Aspergillus species (100%)
JASK000209-19 Fifth floor, Suite 500, cubicle area, Ms. Harrington	Air, Total Fungal Count w/ lds	7 cfu/m ³	Alternaria species (100%)
JASK000209-19 Fifth floor, Suite 500, cubicle area, Ms. Harrington	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (100%)
JASK000209-20 Outside air, roof	Air, Total Fungal Count w/ lds	77 cfu/m ³	Penicillium species (45%) Sterilia mycelia (36%) Cladosporium species (11%)
JASK000209-20 Outside air, roof	Air, Stachybotrys Culture	35 cfu/m ³	Cladosporium species (40%) Aspergillus niger (20%) Alternaria species (20%) Penicillium species (20%)
JASK000210-01 Sixth floor, Suite 638-640, north, AHU1, Room 638, reception, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-01 Sixth floor, Suite 638-640, north, AHU1, Room 638, reception, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-02 Sixth floor, Suite 624, north, AHU1, reception, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-02 Sixth floor, Suite 624, north, AHU1, reception, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-03 Sixth floor, Suite 602, south, AHU2, entrance to Mr. Richey's office, supply louver	Wipe, Total Fungal Count w/ lds	10 cfu/in ²	Sterilia mycelia (100%)
JASK000210-03 Sixth floor, Suite 602, south, AHU2, entrance to Mr. Richey's office, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-04 Sixth floor, Suite 601, south, AHU2, Y. Askew's cubicle, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-04 Sixth floor, Suite 601, south, AHU2, Y. Askew's cubicle, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-05 Fourth floor, Suite 400, south, AHU2, J. Thomas, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-05 Fourth floor, Suite 400, south, AHU2, J. Thomas, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A

Sample ID	Location	Test Method	Results
JASK000210-06	Fourth floor, Suite 403, north, AHU1, E. Forbes, supply louver	Wipe, Total Fungal Count w/ lds	No Growth
JASK000210-06	Fourth floor, Suite 403, north, AHU1, E. Forbes, supply louver	Wipe, Stachybotrys Culture	No Growth
JASK000210-07	Fourth floor, Suite 401, north, AHU1, in hall 36' east of Pepsi machine, supply louver	Wipe, Total Fungal Count w/ lds	No Growth
JASK000210-07	Fourth floor, Suite 401, north, AHU1, in hall 36' east of Pepsi machine, supply louver	Wipe, Stachybotrys Culture	No Growth
JASK000210-08	Fourth floor, Suite 404, north, AHU1, Cubicle 402C, supply louver	Wipe, Total Fungal Count w/ lds	No Growth
JASK000210-08	Fourth floor, Suite 404, north, AHU1, Cubicle 402C, supply louver	Wipe, Stachybotrys Culture	No Growth
JASK000210-09	Eighth floor, Suite 808, south, AHU2, receptionist area for Keegan, supply louver	Wipe, Total Fungal Count w/ lds	No Growth
JASK000210-09	Eighth floor, Suite 808, south, AHU2, receptionist area for Keegan, supply louver	Wipe, Stachybotrys Culture	No Growth
JASK000210-10	Eighth floor, Suite 810, south, AHU2, receptionist for DeLoach, supply louver	Wipe, Total Fungal Count w/ lds	No Growth
JASK000210-10	Eighth floor, Suite 810, south, AHU2, receptionist for DeLoach, supply louver	Wipe, Stachybotrys Culture	No Growth
JASK000210-11	Fifth floor, Suite 500-559, north, AHU1, receptionist for Matthew, supply louver	Wipe, Total Fungal Count w/ lds	20 cfu/in ²
JASK000210-11	Fifth floor, Suite 500-559, north, AHU1, receptionist for Matthew, supply louver	Wipe, Stachybotrys Culture	No growth
JASK000210-12	Fifth floor, Suite 517, north, AHU1, Mercurius' office, supply louver	Wipe, Total Fungal Count w/ lds	No Growth
JASK000210-12	Fifth floor, Suite 517, north, AHU1, Mercurius' office, supply louver	Wipe, Stachybotrys Culture	No Growth

JASK000210-13 Fifth floor, Suite 500, south, AHU2, Szymanski's office, supply louver	Wipe, Total Fungal Count w/ Ids	150 cfu/in ²	Aspergillus species (66%) Aspergillus niger (34%)
JASK000210-13 Fifth floor, Suite 500, south, AHU2, Szymanski's office, supply louver	Wipe, Stachybotrys Culture & Total	100 cfu/in ²	Aspergillus species (100%)
JASK000210-14 Fifth floor, Suite 537-544, north, AHU1, Room 599, supply louver	Wipe, Total Fungal Count w/ Ids	30 cfu/in ²	Cladosporium species (66%) Aspergillus species (34%)
JASK000210-14 Fifth floor, Suite 537-544, north, AHU1, Room 599, supply louver	Wipe, Stachybotrys Culture & Total	30 cfu/in ²	Cladosporium species (66%) Aspergillus species (34%)
JASK000210-15 Ninth floor, Room 9182, south, AHU2, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-15 Ninth floor, Room 9182, south, AHU2, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-16 Ninth floor, conference room, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-16 Ninth floor, conference room, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-17 Ninth floor, Room 9113, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-17 Ninth floor, Room 9113, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-18 Ninth floor, Room 9112, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-18 Ninth floor, Room 9112, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-19 Ninth floor, Room 9116, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	40 cfu/in ²	Penicillium species (75%) Sterilia mycelia (25%)
JASK000210-19 Ninth floor, Room 9116, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	30 cfu/in ²	Penicillium species (100%)
JASK000210-20 Ninth floor, Room 9101, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-20 Ninth floor, Room 9101, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A

JASK000210-21 Ninth floor, Room 9121, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-21 Ninth floor, Room 9121, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-22 Ninth floor, Room 9128, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-22 Ninth floor, Room 9128, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-23 Ninth floor, Room 9137, north, AHU1, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-23 Ninth floor, Room 9137, north, AHU1, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-24 Ninth floor, Room 9150, south, AHU2, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-24 Ninth floor, Room 9150, south, AHU2, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-25 Ninth floor, Room 9163, south, AHU2, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-25 Ninth floor, Room 9163, south, AHU2, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-26 Ninth floor, Room 9158, south, AHU2, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-26 Ninth floor, Room 9158, south, AHU2, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-27 Ninth floor, Room 9198, south, AHU2, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-27 Ninth floor, Room 9198, south, AHU2, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-28 Ninth floor, Room 9187A, south, AHU2, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-28 Ninth floor, Room 9187A, south, AHU2, supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-29 First floor, Suite 107, south, AHU2, rear room supply louver	Wipe, Total Fungal Count w/ Ids	10 cfu/in ²	Sterilia mycelia (100%)

JASK000210-29 First floor, Suite 107, south, AHU2, rear room supply louver	Wipe, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-30 AHU1, filter side of coil, supply air system	Wipe, Total Fungal Count w/ lds	100 cfu/in ²	Rhodotorula species (40%) Streptomyces species (30%) Sterilia mycelia (20%) Aureobasidium species (10%)
JASK000210-30 AHU1, filter side of coil, supply air system	Wipe, Stachybotrys Culture & Total	130 cfu/in ²	Streptomyces species (69%) Sterilia mycelia (15%) Penicillium species (8%) Cladosporium species (8%)
JASK000210-31 AHU1, fan side of coil, supply air system	Wipe, Total Fungal Count w/ lds	5400 cfu/in ²	Rhodotorula species (87%) Yeast (8%) Cladosporium species (1%) Penicillium species (1%) Pithomyces species (1%)
JASK000210-31 AHU1, fan side of coil, supply air system	Wipe, Stachybotrys Culture & Total	6100 cfu/in ²	Rhodotorula species (90%) Yeast (3%) Penicillium species (1%) Cladosporium species (1%) Sterilia mycelia (1%)
JASK000210-32 AHU1, axial vane, return air system	Wipe, Total Fungal Count w/ lds	80 cfu/in ²	Chaetomium species (38%) Aspergillus species (25%) Penicillium species (12%) Epicoccum species (12%) Cladosporium species (12%)
JASK000210-32 AHU1, axial vane, return air system	Wipe, Stachybotrys Culture & Total	80 cfu/in ²	Aspergillus species (63%) Chaetomium species (27%)
JASK000210-33 AHU1, axial vane, return air system	Wipe, Total Fungal Count w/ lds	70 cfu/in ²	Chaetomium species (86%) Aspergillus niger (14%)
JASK000210-33 AHU1, axial vane, return air system	Wipe, Stachybotrys Culture & Total	60 cfu/in ²	Chaetomium species (66%) Cladosporium species (17%) Rhizopus species (17%)
JASK000210-34 AHU2, filter side of coil, supply air system	Wipe, Total Fungal Count w/ lds	60 cfu/in ²	Alternaria species (34%) Yeast (17%) Black yeast (17%) Cladosporium species (16%) Sterilia mycelia (16%)
JASK000210-34 AHU2, filter side of coil, supply air system	Wipe, Stachybotrys Culture & Total	90 cfu/in ²	Sterilia mycelia (56%) Alternaria species (11%) Yeast (11%) Cladosporium species (11%) Penicillium species (11%)
JASK000210-35 AHU2, fan side of coil, supply air system	Wipe, Total Fungal Count w/ lds	6900 cfu/in ²	Streptomyces species (56%) Rhodotorula species (40%) Cladosporium species (1%) Sterilia mycelia (1%)
JASK000210-35 AHU2, fan side of coil, supply air system	Wipe, Stachybotrys Culture & Total	3800 cfu/in ²	Streptomyces species (51%) Rhodotorula species (43%) Cladosporium species (1%) Epicoccum species (1%)
JASK000210-36 AHU2, shaft side, axial vane, return air system	Wipe, Total Fungal Count w/ lds	30 cfu/in ²	Penicillium species (34%) Aspergillus species (33%) Streptomyces species (33%)

JASK000210-36 AHU2, shaft side, axial vane, return air system	Wipe, Stachybotrys Culture & Total	10 cfu/in ²	Stachybotrys chartarum (atra) (100%)
JASK000210-37 AHU2, motor side axial vane, return air system	Wipe, Total Fungal Count w/ Ids	150 cfu/in ²	Penicillium species (60%) Aspergillus species (7%) Rhizopus species (7%) Aspergillus niger (7%) Chaetomium species (7%)
JASK000210-37 AHU2, motor side axial vane, return air system	Wipe, Stachybotrys Culture & Total	190 cfu/in ²	Penicillium species (42%) Aspergillus niger (21%) Cladosporium species (16%) Stachybotrys chartarum (atra) (5%) Chaetomium species (5%)

ATTACHMENT B

Laboratory Data Sheets

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191
Attn:
Project: 1046-00-0043

Date Received: 1/31/00
Date Reported: 2/7/00
Page 1 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number:	JASD000131-1	Lab Sample Number:	20 0091-01
Sampling Location:	9th Floor, Conference Room		
Date Collected:	1/31/00	Volume/Area:	169.8 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 24 cfu/m³

FUNGUS Isolated:	Rhizopus species	50%
	Cladosporium species	50%

Date Analyzed: 2/8/00

Total FUNGAL Count: 24 cfu/m³

FUNGUS Isolated:	Stachybotrys chartarum (atra)	50%
	Aspergillus niger	25%

Detection Limits: 6 cfu/m³

Date Analyzed: 2/7/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Reported: 2/7/00
Page 2 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-2 Lab Sample Number: 20 0091-02
Sampling Location: 9th Floor, Room 9182
Date Collected: 1/31/00 Volume/Area: 169.8 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 36 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Aspergillus niger 17%

Date Analyzed: 2/7/00

Total FUNGAL Count: 30 cfu/m³

FUNGUS Isolated: Stachybotrys chartarum (atra) 40%
Penicillium species 40%

Detection Limits: 6 cfu/m³

Date Analyzed: 2/7/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: JASD000131-3 Lab Sample Number: 20 0091-03
Sampling Location: 9th Floor, Room 9113
Date Collected: 1/31/00 Volume/Area: 169.8 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/7/00

Total FUNGAL Count: 24 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Yeast 25%

Detection Limits: 6 cfu/m³

Date Analyzed: 2/7/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 1/31/00
Date Reported: 2/7/00
Page 3 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-4 Lab Sample Number: 20 0091-04

Sampling Location: 9th Floor, Room 9112

Date Collected: 1/31/00 Volume/Area: 169.8 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 18 cfu/m³

FUNGUS Isolated: Penicillium species 33%
Cladosporium species 33%

Date Analyzed: 2/8/00

Total FUNGAL Count: 18 cfu/m³

FUNGUS Isolated: Penicillium species 67%
Cladosporium species 33%

Detection Limits: 6 cfu/m³

Date Analyzed: 2/7/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Reported: 2/7/00
Page 4 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-5 Lab Sample Number: 20 0091-05

Sampling Location: 9th Fl, Office at N End of Corridor from Conf Rm

Date Collected: 1/31/00 Volume/Area: 169.8 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 6 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Date Analyzed: 2/7/00

Total FUNGAL Count: 18 cfu/m³

FUNGUS Isolated: Yeast 67%

Cladosporium species 33%

Detection Limits: 6 cfu/m³

Date Analyzed: 2/7/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 1/31/00
Date Reported: 2/7/00
Page 5 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number:	JASD000131-6	Lab Sample Number:	20 0091-06
Sampling Location:	Outside		
Date Collected:	1/31/00	Volume/Area:	169.8 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	66 cfu/m ³		
FUNGUS Isolated:	Cladosporium species		27%
	Penicillium species		18%
Date Analyzed:	2/7/00		
Total FUNGAL Count:	66 cfu/m ³		
FUNGUS Isolated:	Sterilia mycelia		45%
	Penicillium species		18%
Detection Limits:	6 cfu/m ³		
Date Analyzed:	2/7/00		
Analyst:	Patricia R. Vestal, M.S., SM (ASCP)		

Client Sample Number:	JASD000131-7	Lab Sample Number:	20 0091-07
Sampling Location:	Blank		
Date Collected:	1/31/00	Volume/Area:	0 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	No Growth.		
Detection Limits:	N/A		
Date Analyzed:	2/7/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	N/A		
Date Analyzed:	2/7/00		
Analyst:	Patricia R. Vestal, M.S., SM (ASCP)		

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Date Received: 1/31/00
 Date Reported: 2/7/00
 Page 6 of 11
 Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-1 **Lab Sample Number:** 20 0091-08
Sampling Location: 9th Floor, Conference Room
Date Collected: 1/31/00 **Volume/Area:** 90 L

TEST REQUESTED: 1054 NON-VIABLE, Spore Trap Analysis

<u>SPORE IDENTIFICATION</u>	<u>RESULTS</u>	<u>UNITS</u>
Ascomycetes		Spores/m ³
Basidiomycetes		Spores/m ³
Smuts, Periconia, Myxomycetes		Spores/m ³
Fungi		Spores/m ³
Rusts		Spores/m ³
Perithecia, Aspergillus group		Spores/m ³
Alternaria		Spores/m ³
Aspergillus		Spores/m ³
Chaetomium		Spores/m ³
Dematiaceae, Clavariaceae group		Spores/m ³
Colorless		Spores/m ³
Extracellular		Spores/m ³
Fusarium		Spores/m ³
Fungi		Spores/m ³
Curvularia		Spores/m ³
Bacillales		Spores/m ³
Pollen grains		Spores/m ³
Trichosporon		Spores/m ³
Epicoccum		Spores/m ³
Rhizoctonia		Spores/m ³
Oidium		Spores/m ³
Trichosporon		Spores/m ³

TOTAL SPORES: 66 Spores/m³

Detection Limits: 11 Spores/m³

Notes: Spore count may be underestimated due to heavy particulate.

Date Analyzed: 2/3/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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 Project: 1046-00-0043

Date Received: 1/31/00
 Date Reported: 2/7/00
 Page 7 of 11
 Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-2 Lab Sample Number: 20 0091-09
 Sampling Location: 9th Floor, Room 9182
 Date Collected: 1/31/00 Volume/Area: 90 L

TEST REQUESTED: 1054 NON-VIABLE, Spore Trap Analysis

<u>SPORE IDENTIFICATION</u>	<u>RESULTS</u>	<u>UNITS</u>
Cladosporium		Spores/m ³
Basidiospores		Spores/m ³
Peronospora		Spores/m ³
Penicillium/Aspergillus group		Spores/m ³
Aureobasidium		Spores/m ³
Drechslera / Bipolaris group		Spores/m ³
Arthrinium		Spores/m ³
Botrytis		Spores/m ³
Stachybotrys		Spores/m ³
Unknown	44	Spores/m ³
Hyphal Elements	11	Spores/m ³
Torula herbarum		Spores/m ³
TOTAL SPORES:	<u>77</u>	<u>Spores/m³</u>

Detection Limits: 11 Spores/m³

Notes: Moderate amount of fibers and particulate observed.

Date Analyzed: 2/3/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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 Project: 1046-00-0043

Date Received: 1/31/00
 Date Reported: 2/7/00
 Page 8 of 11
 Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-3 **Lab Sample Number:** 20 0091-10
Sampling Location: 9th Floor, Room 9113
Date Collected: 1/31/00 **Volume/Area:** 90 L

TEST REQUESTED: 1054 NON-VIABLE, Spore Trap Analysis

<u>SPORE IDENTIFICATION</u>	<u>RESULTS</u>	<u>UNITS</u>
Ascomycetes		Spores/m ³
Ascospores		Spores/m ³
Basidiomycetes		Spores/m ³
Smuts, Periconia, Myxomycetes		Spores/m ³
Fungi imperfecti		Spores/m ³
Rusts		Spores/m ³
Phycomycetes/Ascomycetes group		Spores/m ³
Alternaria		Spores/m ³
Arthrospora		Spores/m ³
Chaetomium		Spores/m ³
Dactyliaria, Didymosporium		Spores/m ³
Colorless		Spores/m ³
Aspergillus		Spores/m ³
Fusarium		Spores/m ³
Botrytis		Spores/m ³
Curvularia		Spores/m ³
Sphaeria		Spores/m ³
Pollen grains		Spores/m ³
Glomerella		Spores/m ³
Epicoccum		Spores/m ³
Physalis fragments		Spores/m ³
Oidium		Spores/m ³
Trichosporium		Spores/m ³

TOTAL SPORES: 11 Spores/m³

Detection Limits: 11 Spores/m³

Date Analyzed: 2/3/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Attn:
Project: 1046-00-0043

Date Received: 1/31/00
Date Reported: 2/7/00
Page 9 of 11
Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-4 Lab Sample Number: 20 0091-11
Sampling Location: 9th Floor, Room 9112
Date Collected: 1/31/00 Volume/Area: 90 L

TEST REQUESTED: 1054 NON-VIABLE, Spore Trap Analysis

<u>SPORE IDENTIFICATION</u>	<u>RESULTS</u>	<u>UNITS</u>
Cladosporium		Spores/m ³
Basidiospores		Spores/m ³
Peronospora		Spores/m ³
Penicillium/Aspergillus group		Spores/m ³
Aureobasidium		Spores/m ³
Drechslera / Bipolaris group		Spores/m ³
Arthrinium		Spores/m ³
Botrytis		Spores/m ³
Stachybotrys	22	Spores/m ³
Unknown		Spores/m ³
Hyphal Elements		Spores/m ³
Torula herbarum		Spores/m ³
TOTAL SPORES:	66	Spores/m³
Detection Limits:	11 Spores/m ³	
Date Analyzed:	2/3/00	
Analyst:	Patricia R. Vestal, M.S., SM (ASCP)	

Certificate of Laboratory Analysis

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 11800 Sunrise Valley Dr., Suite 1200
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 Attn:
 Project: 1046-00-0043

Date Received: 1/31/00
 Date Reported: 2/7/00
 Page 10 of 11
 Job ID: 20 0091

5111 Leesburg Pk (Skyline V)

Client Sample Number: JASD000131-5 **Lab Sample Number:** 20 0091-12
Sampling Location: 9th Fl, Office at N End of Corridor from Conf Rm
Date Collected: 1/31/00 **Volume/Area:** 90 L

TEST REQUESTED: 1054 NON-VIABLE, Spore Trap Analysis

<u>SPORE IDENTIFICATION</u>	<u>RESULTS</u>	<u>UNITS</u>
Ascomycetes		Spores/m ³
Basidiomycetes		Spores/m ³
Smuts, Periconia, Myxomycetes	11	Spores/m ³
Fungi (unclassified)		Spores/m ³
Rusts		Spores/m ³
Fungi (unclassified) (20%)		Spores/m ³
Alternaria		Spores/m ³
Aspergillus		Spores/m ³
Chaetomium		Spores/m ³
Claviceps, Ergasilus, etc.		Spores/m ³
Colorless		Spores/m ³
Fusarium		Spores/m ³
Geotrichum		Spores/m ³
Curvularia		Spores/m ³
Penicillium		Spores/m ³
Pollen grains		Spores/m ³
Uromyces		Spores/m ³
Epicoccum		Spores/m ³
Exoascus, etc.		Spores/m ³
Oidium		Spores/m ³
Fungi (unclassified)		Spores/m ³
TOTAL SPORES:	44	Spores/m³

Detection Limits: 11 Spores/m³

Date Analyzed: 2/3/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Reported: 2/10/00
Page 1 of 20
Job ID: 20 0096

Client Sample Number:	JASK000201-1	Lab Sample Number:	20 0096-01
Sampling Location:	9th Fl, Room 9180		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Aspergillus niger		50%
	Penicillium species		50%
Date Analyzed:	2/8/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Stachybotrys chartarum (atra)		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/8/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Reported: 2/10/00
Page 2 of 20
Job ID: 20 0096

Client Sample Number: JASK000201-2 Lab Sample Number: 20 0096-02

Sampling Location: 9th Fl, Room 9114

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated:	Cladosporium species	34%
	Phoma species	33%
	Sterilia mycelia	33%

Date Analyzed: 2/8/00

Total FUNGAL Count: 42 cfu/m³

FUNGUS Isolated:	Cladosporium species	33%
	Drechslera species	17%
	Penicillium species	17%
	Phoma species	17%
	Acremonium (Cephalosporium) species	16%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/8/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 3 of 20
Job ID: 20 0096

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Client Sample Number: JASK000201-3 **Lab Sample Number:** 20 0096-03

Sampling Location: 9th Floor, Room 9115

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aspegillus ochraceous

100%

Date Analyzed: 2/7/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-4

Lab Sample Number: 20 0096-04

Sampling Location: 9th Fl, Room 9111

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/7/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 4 of 20
Job ID: 20 0096

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Client Sample Number:	JASK000201-5	Lab Sample Number:	20 0096-05
Sampling Location:	9th Fl, Room 9116		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Penicillium species		100%
Date Analyzed:	2/7/00		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Penicillium species		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/7/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000201-6	Lab Sample Number:	20 0096-06
Sampling Location:	9th Fl, Room 9110		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	No Growth.		
Date Analyzed:	2/7/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Stachybotrys chartarum (atra)		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/7/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Reported: 2/10/00
Page 5 of 20
Job ID: 20 0096

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Client Sample Number:	JASK000201-7	Lab Sample Number:	20 0096-07
Sampling Location:	9 th Fl, Room 9117		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	35 cfu/m ³		
FUNGUS Isolated:	Penicillium species		40%
	Aspergillus species		20%
	Scopulariopsis candidus		20%
	Sterilia mycelia		20%
Date Analyzed:	2/7/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Penicillium species		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/7/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Reported: 2/10/00
Page 6 of 20
Job ID: 20 0096

Client Sample Number:	JASK000201-8	Lab Sample Number:	20 0096-08
Sampling Location:	9th Fl, Room 9109		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Cladosporium species		100%
Date Analyzed:	2/7/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Aspergillus species		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/7/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000201-9	Lab Sample Number:	20 0096-09
Sampling Location:	9th Fl, Room 9118		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	No Growth.		
Date Analyzed:	2/7/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/7/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Reported: 2/10/00
Page 7 of 20
Job ID: 20 0096

Client Sample Number: JASK000201-10 **Lab Sample Number:** 20 0096-10
Sampling Location: 9th Fl, Room 9117A
Date Collected: 2/1/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/7/00
Total FUNGAL Count: No Growth.
Detection Limits: 7 cfu/m³
Date Analyzed: 2/7/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-11 **Lab Sample Number:** 20 0096-11
Sampling Location: 9th Fl, Room 9108A
Date Collected: 2/1/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/7/00
Total FUNGAL Count: 14 cfu/m³
FUNGUS Isolated: Alternaria species 50%
Sterilia mycelia 50%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/7/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 8 of 20
Job ID: 20 0096

Skyline V

Client Sample Number: JASK000201-12 **Lab Sample Number:** 20 0096-12

Sampling Location: 9th Fl, Room 9107

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aspergillus ochraceous 100%

Date Analyzed: 2/7/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-13 **Lab Sample Number:** 20 0096-13

Sampling Location: 9th Fl, Room 9180A

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Sterilia mycelia 66%

Aspergillus ochraceous 34%

Date Analyzed: 2/7/00

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated: Stachybotrys chartarum (atra) 75%

Penicillium species 25%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 9 of 20
Job ID: 20 0096

Client Sample Number: JASK000201-14 Lab Sample Number: 20 0096-14
Sampling Location: 9th Fl, Room 9179
Date Collected: 2/1/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 35 cfu/m³

FUNGUS Isolated: Penicillium species 60%
Cladosporium species 40%

Date Analyzed: 2/7/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-15 Lab Sample Number: 20 0096-15
Sampling Location: 9th Fl, Room 9183
Date Collected: 2/1/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Heteroconium species 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Cladosporium species 50%
Penicillium species 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 10 of 20
Job ID: 20 0096

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Client Sample Number: JASK000201-16 **Lab Sample Number:** 20 0096-16

Sampling Location: 9 th Fl, Room 9186

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Streptomyces species 33%
Aureobasidium species 34%
Heteroconium species 33%

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-17 **Lab Sample Number:** 20 0096-17

Sampling Location: 9th Fl, Room 9187A

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/7/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 11 of 20
Job ID: 20 0096

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Client Sample Number: JASK000201-18 **Lab Sample Number:** 20 0096-18

Sampling Location: 9th Fl, Room 9178

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Cladosporium species

100%

Date Analyzed: 2/7/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Streptomyces species

100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-19

Lab Sample Number: 20 0096-19

Sampling Location: 9th Fl, Room 9177

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Arthrinium

50%

Penicillium species

50%

Date Analyzed: 2/8/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/7/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 12 of 20
Job ID: 20 0096

Client Sample Number: JASK000201-20 **Lab Sample Number:** 20 0096-20

Sampling Location: 9th Fl, Room 9178B

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Heteroconium species 50%
Verticillium species 50%

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-21 **Lab Sample Number:** 20 0096-21

Sampling Location: 9th Fl, Room 9188

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Verticillium species 34%
Sterilia mycelia 33%
Heteroconium species 33%

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 13 of 20
Job ID: 20 0096

Client Sample Number:	JASK000201-22	Lab Sample Number:	20 0096-22
Sampling Location:	9th Fl, Room 9176		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Heteroconium species		100%
Date Analyzed:	2/9/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Sterilia mycelia		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000201-23	Lab Sample Number:	20 0096-23
Sampling Location:	9th Fl, Room 9189		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	No Growth.		
Date Analyzed:	2/9/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 14 of 20
Job ID: 20 0096

Skyline V

Client Sample Number:	JASK000201-24	Lab Sample Number:	20 0096-24
Sampling Location:	9th Fl, Room 9175		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	No Growth.		
Date Analyzed:	2/9/00		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Penicillium species		50%
	Aspergillus species		50%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000201-25	Lab Sample Number:	20 0096-25
Sampling Location:	9th Fl, Room 9106		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Aspergillus species		100%
Date Analyzed:	2/9/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 15 of 20
Job ID: 20 0096

Client Sample Number: JASK000201-26 **Lab Sample Number:** 20 0096-26
Sampling Location: 9th Fl, Room 9103
Date Collected: 2/1/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/9/00
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Streptomyces species 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/9/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-27 **Lab Sample Number:** 20 0096-27
Sampling Location: 9th Fl, Room 9104
Date Collected: 2/1/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/9/00
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Penicillium species 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/9/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 16 of 20
Job ID: 20 0096

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Client Sample Number: JASK000201-28 Lab Sample Number: 20 0096-28

Sampling Location: Outside

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-29 Lab Sample Number: 20 0096-29

Sampling Location: 9th Fl, Room 9105

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Reported: 2/10/00
Page 17 of 20
Job ID: 20 0096

Client Sample Number:	JASK000201-30	Lab Sample Number:	20 0096-30
Sampling Location:	9th Fl, Room 9102		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Streptomyces species		100%
Date Analyzed:	2/9/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Streptomyces species		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000201-31	Lab Sample Number:	20 0096-31
Sampling Location:	9th Fl, Room 9190		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Penicillium species		100%
Date Analyzed:	2/9/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Sterilia mycelia		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Reported: 2/10/00
Page 18 of 20
Job ID: 20 0096

Client Sample Number:	JASK000201-32	Lab Sample Number:	20 0096-32
Sampling Location:	9th Fl, Room 9192		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Sterilia mycelia		50%
	Heteroconium species		50%
Date Analyzed:	2/9/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000201-33	Lab Sample Number:	20 0096-33
Sampling Location:	9th Fl, Room 9174		
Date Collected:	2/1/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Cladosporium species		100%
Date Analyzed:	2/9/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/9/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 19 of 20
Job ID: 20 0096

Skyline V

Client Sample Number: JASK000201-34 **Lab Sample Number:** 20 0096-34

Sampling Location: 9th Fl, Room 9191

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus species 50%
Black yeast 50%

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-35 **Lab Sample Number:** 20 0096-35

Sampling Location: 9th Fl, Room 9193

Date Collected: 2/1/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Heteroconium species 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/1/00
Date Reported: 2/10/00
Page 20 of 20
Job ID: 20 0096

Client Sample Number: JASK000201-36 **Lab Sample Number:** 20 0096-36
Sampling Location: 9th Fl, Room 9194
Date Collected: 2/1/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/9/00
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Sterilia mycelia 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/9/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000201-37 **Lab Sample Number:** 20 0096-37
Sampling Location: 9th Fl, Room 9101
Date Collected: 2/1/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/9/00
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Alternaria species 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/9/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 1 of 20
Job ID: 20 0107

Skyline V

Client Sample Number:	JASK000202-1	Lab Sample Number:	20 0107-01
Sampling Location:	9th Fl, Room 9100		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-2	Lab Sample Number:	20 0107-02
Sampling Location:	9th Fl, Room 9099		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 2 of 20
Job ID: 20 0107

Skyline V

Client Sample Number:	JASK000202-3	Lab Sample Number:	20 0107-03
Sampling Location:	9th Fl, Room 9098		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-4	Lab Sample Number:	20 0107-04
Sampling Location:	9th Fl, Room 9094		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 3 of 20
Job ID: 20 0107

Skyline V

Client Sample Number:	JASK000202-5	Lab Sample Number:	20 0107-05
Sampling Location:	9th Fl, Room 9095		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-6	Lab Sample Number:	20 0107-06
Sampling Location:	9th Fl, Room 9097		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 4 of 20
Job ID: 20 0107

Skyline V

Client Sample Number: JASK000202-7 **Lab Sample Number:** 20 0107-07

Sampling Location: 9th Fl, Room 9096

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Streptomyces species

100%

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-8 **Lab Sample Number:** 20 0107-08

Sampling Location: 9th Fl, Room 9093

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species

100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 5 of 20
Job ID: 20 0107

Client Sample Number: JASK000202-9 **Lab Sample Number:** 20 0107-09
Sampling Location: 9th Fl, Room 9119
Date Collected: 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-10 **Lab Sample Number:** 20 0107-10
Sampling Location: 9th Fl, Room 9121
Date Collected: 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus species 50%

Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 6 of 20
Job ID: 20 0107

Skyline V

Client Sample Number: JASK000202-11 **Lab Sample Number:** 20 0107-11
Sampling Location: 9th Fl, Room 9120
Date Collected: 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-12 **Lab Sample Number:** 20 0107-12
Sampling Location: 9th Fl, Room 9122
Date Collected: 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 7 of 20
Job ID: 20 0107

Client Sample Number:	JASK000202-13	Lab Sample Number:	20 0107-13
Sampling Location:	9th Fl, Room 9124		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-14	Lab Sample Number:	20 0107-14
Sampling Location:	9th Fl, Room 9127		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Paecilomyces inflatus 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 8 of 20
Job ID: 20 0107

Client Sample Number: JASK000202-15 **Lab Sample Number:** 20 0107-15
Sampling Location: 9th Fl, Room 9128
Date Collected: 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-16 **Lab Sample Number:** 20 0107-16
Sampling Location: Outside
Date Collected: 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Date Analyzed: 2/9/00

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Sterilia mycelia 34%

Cladosporium species 33%

Yeast 33%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 9 of 20
Job ID: 20 0107

Skyline V

Client Sample Number:	JASK000202-17	Lab Sample Number:	20 0107-17
Sampling Location:	9th Fl, Room 9131		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-18	Lab Sample Number:	20 0107-18
Sampling Location:	9th Fl, Room 9126		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 10 of 20
Job ID: 20 0107

Skyline V

Client Sample Number:	JASK000202-19	Lab Sample Number:	20 0107-19
Sampling Location:	9th Fl, Room 9123		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Steriia mycelia 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-20	Lab Sample Number:	20 0107-20
Sampling Location:	9th Fl, Room 9136A		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 11 of 20
Job ID: 20 0107

Skyline V

Client Sample Number:	JASK000202-21	Lab Sample Number:	20 0107-21
Sampling Location:	9th Fl, Room 9130		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-22	Lab Sample Number:	20 0107-22
Sampling Location:	9th Fl, Room 9195		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Results: Confluent growth of Trichoderma species noted. Quantitation not possible.

Date Analyzed: 2/9/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Skyline V

Date Received: 2/2/00
Date Reported: 2/10/00
Page 12 of 20
Job ID: 20 0107

Client Sample Number: JASK000202-23 **Lab Sample Number:** 20 0107-23
Sampling Location: 9th Fl, Room 9196
Date Collecte 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Heteroconium species 100%

Date Analyzed: 2/25/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Heteroconium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/25/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-24 **Lab Sample Number:** 20 0107-24
Sampling Location: 9th Fl, Room 9197
Date Collecte 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/9/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/9/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 13 of 20
Job ID: 20 0107

Skyline V

Client Sample Number: JASK000202-25 **Lab Sample Number:** 20 0107-25

Sampling Location: 9th Fl, Room 9198

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Paecilomyces species

100%

Date Analyzed: 2/10/19

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus species

50%

Sterilia mycelia

50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-26 **Lab Sample Number:** 20 0107-26

Sampling Location: 9th Fl, Room 9199

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 14 of 20
Job ID: 20 0107

Skyline V

Client Sample Number: JASK000202-27 **Lab Sample Number:** 20 0107-27

Sampling Location: 9th Fl, Room 9201

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aspergillus species

100%

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Stachybotrys chartarum (atra)

100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-28 **Lab Sample Number:** 20 0107-28

Sampling Location: 9th Fl, Room 9201A

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Cladosporium species

34%

Yeast

33%

Sterilia mycelia

33%

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia

100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 15 of 20
Job ID: 20 0107

Skyline V

Client Sample Number:	JASK000202-29	Lab Sample Number:	20 0107-29
Sampling Location:	9th Fl, Room 9202		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Yeast 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-30	Lab Sample Number:	20 0107-30
Sampling Location:	9th Fl, Room 9203		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Cladosporium species 50%
Steriia mycelia 50%

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 16 of 20
Job ID: 20 0107

Skyline V

Client Sample Number: JASK000202-31 **Lab Sample Number:** 20 0107-31

Sampling Location: 9th Fl, Room 9204

Date Collected: 2/2/00

Volume/Area: 141.5L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Alternaria species 50%
Aspergillus ochraceous 50%

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-32 **Lab Sample Number:** 20 0107-32

Sampling Location: 9th Fl, Room 9205

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 17 of 20
Job ID: 20 0107

Client Sample Number: JASK000202-33 **Lab Sample Number:** 20 0107-33

Sampling Location: 9th Fl, Room 9206

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Cladosporium species 34%
Aspergillus species 33%
Fungus isolated; I.D. to follow 33%

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-34 **Lab Sample Number:** 20 0107-34

Sampling Location: 9th Fl, Room 9207

Date Collected: 2/2/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aureobasidium species 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 18 of 20
Job ID: 20 0107

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Client Sample Number: JASK000202-35 **Lab Sample Number:** 20 0107-35
Sampling Location: 9th Fl, Room 9208
Date Collected: 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Paecilomyces species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000202-36 **Lab Sample Number:** 20 0107-36
Sampling Location: 9th Fl, Room 9209
Date Collected: 2/2/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 19 of 20
Job ID: 20 0107

Skyline V

Client Sample Number:	JASK000202-37	Lab Sample Number:	20 0107-37
Sampling Location:	9th Fl, Room 9173		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000202-38	Lab Sample Number:	20 0107-38
Sampling Location:	9th Fl, Room 9169		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/2/00
Date Reported: 2/10/00
Page 20 of 20
Job ID: 20 0107

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Client Sample Number:	JASK000202-39	Lab Sample Number:	20 0107-39
Sampling Location:	9th Fl, Room 9170		
Date Collected:	2/2/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 1 of 23
Job ID: 20 0110

Skyline V

Client Sample Number: JASK000203-1 Lab Sample Number: 20 0110-01

Sampling Location: 9th Fl, Room 9129

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Chrysosporium species 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus species 50%

Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-2 Lab Sample Number: 20 0110-02

Sampling Location: 9th Fl, Room 9132

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Chrysosporium species 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 2 of 23
Job ID: 20 0110

Skyline V

Client Sample Number: JASK000203-3 Lab Sample Number: 20 0110-03

Sampling Location: 9th Fl, Room 9133

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia

100%

Date Analyzed: 2/11/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Botrytis

50%

Sterilia mycelia

50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-4

Lab Sample Number: 20 0110-04

Sampling Location: 9th Fl, Room 9134

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Botrytis

100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 3 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-5 Lab Sample Number: 20 0110-05

Sampling Location: 9th Fl, Room, 9135

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/11/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Paecilomyces inflatus

100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-6 Lab Sample Number: 20 0110-06

Sampling Location: 9th Fl, Room 9136B

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia

100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 4 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-7 Lab Sample Number: 20 0110-07

Sampling Location: 9th Fl, Room 9136

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Cladosporium species 50%
Sterilia mycelia 50%

Date Analyzed: 2/11/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-8 Lab Sample Number: 20 0110-08

Sampling Location: 9th Fl, Room 9137

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Botrytis 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 5 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-9 Lab Sample Number: 20 0110-09

Sampling Location: 9th Fl, Room 9136C

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Aspergillus species 66%
Sterilia mycelia 34%

Date Analyzed: 2/11/00

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Aspergillus species 34%
Paecilomyces inflatus 33%
Sterilia mycelia 33%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 6 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-10 Lab Sample Number: 20 0110-10

Sampling Location: 9th Fl, Room 9138

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 42 cfu/m³

FUNGUS Isolated: Penicillium species 67%
Aspergillus species 17%
Paecilomyces species 16%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-11 Lab Sample Number: 20 0110-11

Sampling Location: 9th Fl, Room 9139

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 7 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-12 Lab Sample Number: 20 0110-12

Sampling Location: 9th Fl, Room 9140

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Penicillium species 66%
Paecilomyces species 34%

Date Analyzed: 2/11/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 8 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-13	Lab Sample Number:	20 0110-13
Sampling Location:	9th Fl, Room 9141		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Penicillium species		50%
	Aspergillus species		50%
Date Analyzed:	2/11/00		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Penicillium species		50%
	Streptomyces species		50%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 9 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-14 Lab Sample Number: 20 0110-14

Sampling Location: 9th Fl, Room 9142

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus species 50%
Sterilia mycelia 50%

Date Analyzed: 2/11/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 10 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-15	Lab Sample Number:	20 0110-15
Sampling Location:	9th Fl, Room 9143		
Date Collected:	2/3/00	Volume/Area:	141.5 L
<u>TEST REQUESTED:</u>	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	21 cfu/m ³		
FUNGUS Isolated:	Cladosporium species		34%
	Aspergillus niger		33%
	Penicillium species		33%
<u>Date Analyzed:</u>	2/11/00		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Penicillium species		50%
	Aspergillus species		50%
<u>Detection Limits:</u>	7 cfu/m ³		
<u>Date Analyzed:</u>	2/11/00		
<u>Analyst:</u>	Ann Atkinson, B.S., MT (ASCP)		

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Date Reported: 2/13/00
Page 11 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-16	Lab Sample Number:	20 0110-16
Sampling Location:	9th Fl, Room 9144		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Penicillium species		100%
Date Analyzed:	2/11/00		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Penicillium species		50%
	Cladosporium species		50%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 12 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-17 Lab Sample Number: 20 0110-17

Sampling Location: 9th Fl, Room 9145

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species

100%

Date Analyzed: 2/11/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Paecilomyces species

100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-18 Lab Sample Number: 20 0110-18

Sampling Location: 9th Fl, Room 9147

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia

100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: 1046-00-0043

Date Received: 2/4/00
Date Reported: 2/13/00
Page 13 of 23
Job ID: 20 0110

Skyline V

Client Sample Number: JASK000203-19 **Lab Sample Number:** 20 0110-19

Sampling Location: 9th Fl, Room 9167

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/11/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia

100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-20

Lab Sample Number: 20 0110-20

Sampling Location: 9th Fl, Room 9171

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 14 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-21 Lab Sample Number: 20 0110-21

Sampling Location: 9th Fl, Room 9172

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-22 Lab Sample Number: 20 0110-22

Sampling Location: 9th Fl, Room 9158

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Heteroconium species 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 15 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-23	Lab Sample Number:	20 0110-23
Sampling Location:	9th Fl, Room 9165		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	No Growth.		
Date Analyzed:	2/11/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	JASK000203-24	Lab Sample Number:	20 0110-24
Sampling Location:	9th Fl, Room 9157		
Date Collected:	2/3/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	No Growth.		
Date Analyzed:	2/11/00		
Total FUNGAL Count:	7 cfu/m ³		
FUNGUS Isolated:	Sterilia mycelia		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/11/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 16 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-25 Lab Sample Number: 20 0110-25

Sampling Location: 9th Fl, Room 9164

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Botrytis 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-26 Lab Sample Number: 20 0110-26

Sampling Location: 9th Fl, Room 9163

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 17 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-27 **Lab Sample Number:** 20 0110-27
Sampling Location: 9th Fl, Room 9162
Date Collected: 2/3/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/11/00
Total FUNGAL Count: No Growth.
Detection Limits: 7 cfu/m³
Date Analyzed: 2/11/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-28 **Lab Sample Number:** 20 0110-28
Sampling Location: 9th Fl, Room 9156
Date Collected: 2/3/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: No Growth.
Date Analyzed: 2/11/00
Total FUNGAL Count: No Growth.
Detection Limits: 7 cfu/m³
Date Analyzed: 2/11/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Reported: 2/13/00
Page 18 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-29	Lab Sample Number:	20 0110-29
Sampling Location:	Outside Air, Roof		
Date Collected:	2/3/00	Volume/Area:	141.5 L
<u>TEST REQUESTED:</u>	1030 AIR, Total FUNGAL Count w/Identifications 1038 AIR, Stachybotrys Culture		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Aspergillus species		100%
<u>Date Analyzed:</u>	2/11/00		
Total FUNGAL Count:	91 cfu/m ³		
FUNGUS Isolated:	Penicillium species		38%
	Aspergillus species		31%
	Phoma species		8%
	Paecilomyces species		8%
	Cladosporium species		8%
<u>Detection Limits:</u>	7 cfu/m ³		
<u>Date Analyzed:</u>	2/11/00		
<u>Analyst:</u>	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 19 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-30 **Lab Sample Number:** 20 0110-30
Sampling Location: 9th Fl, Room 9152
Date Collected: 2/3/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Heteroconium species 100%
Date Analyzed: 2/11/00
Total FUNGAL Count: 35 cfu/m³
FUNGUS Isolated: Penicillium species 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/11/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000203-31 **Lab Sample Number:** 20 0110-31
Sampling Location: 9th Fl, Room 9154
Date Collected: 2/3/00 **Volume/Area:** 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Cladosporium species 100%
Date Analyzed: 2/11/00
Total FUNGAL Count: 14 cfu/m³
FUNGUS Isolated: Penicillium species 50%
Alternaria species 50%
Detection Limits: 7 cfu/m³
Date Analyzed: 2/11/00
Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 20 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-32 **Lab Sample Number:** 20 0110-32

Sampling Location: 9th Fl, Room 9151

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Penicillium species 67%
Paecilomyces species 33%

Date Analyzed: 2/11/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aspergillus species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: JASK000203-33 **Lab Sample Number:** 20 0110-33

Sampling Location: 9th Fl, Room 9150

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Penicillium species 67%
Sterilia mycelia 33%

Date Analyzed: 2/11/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 21 of 23
Job ID: 20 0110

Client Sample Number: JASK000203-34 Lab Sample Number: 20 0110-34
Sampling Location: 9th Fl, Room 9148
Date Collected: 2/3/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Streptomyces species 67%
Sterilia mycelia 33%

Date Analyzed: 2/11/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: JASK000203-35 Lab Sample Number: 20 0110-35
Sampling Location: 9th Fl, Room 9149
Date Collected: 2/3/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Date Analyzed: 2/11/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 22 of 23
Job ID: 20 0110

Skyline V

Client Sample Number: JASK000203-36 **Lab Sample Number:** 20 0110-36

Sampling Location: 9th Fl, Room 9146

Date Collected: 2/3/00

Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species

100%

Date Analyzed: 2/11/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species

100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/11/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: JASK000203-37 **Lab Sample Number:** 20 0110-37

Sampling Location: 9th Fl, Rm 9173, Under Wallpaper, West, Wind.

Date Collected: 2/3/00

Volume/Area: 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: 20 cfu/in²

FUNGUS Isolated: Penicillium species

100%

Date Analyzed: 2/11/00

Total FUNGAL Count: 20 cfu/in²

FUNGUS Isolated: Heteroconium species

100%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/11/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/4/00
Date Reported: 2/13/00
Page 23 of 23
Job ID: 20 0110

Client Sample Number:	JASK000203-38	Lab Sample Number:	20 0110-38
Sampling Location:	9th Fl, Rm 9173, On Concrete Fl. under Carpet		
Date Collected:	2/3/00	Volume/Area:	1" x 1"
TEST REQUESTED:	1031 WIPE, Total FUNGAL Count w/identifications 1037 WIPE, Stachybotrys Culture & Total Fungal Count		
Total FUNGAL Count:	40 cfu/in ²		
FUNGUS Isolated:	Penicillium species		67%
	Paecilomyces species		33%
Date Analyzed:	2/11/00		
Total FUNGAL Count:	10 cfu/in ²		
FUNGUS Isolated:	Penicillium species		100%
Detection Limits:	10 cfu/in ²		
Date Analyzed:	2/11/00		
Analyst:	Patricia R. Vestal, M.S., SM (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 1 of 11
Job ID: 20 0114

Client Sample Number:	JASK000204-1	Lab Sample Number:	20 0114-01
Sampling Location:	6th Fl, Ste. 602, Hall Area at Entr. to Richey's		
Date Collected:	2/4/00	Volume/Area:	141.5 L
TEST REQUESTED:	1038 AIR, Stachybotrys Culture 1030 AIR, Total FUNGAL Count w/identifications		
Total FUNGAL Count:	21 cfu/m ³		
FUNGUS Isolated:	Penicillium species		34%
	Chrysosporium species		33%
	Sterilia mycelia		33%
Date Analyzed:	2/10/00		
Total FUNGAL Count:	No Growth.		
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/10/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 2 of 11
Job ID: 20 0114

Skyline V

Client Sample Number: JASK000204-2 **Lab Sample Number:** 20 0114-02
Sampling Location: 6th Fl, Ste. 601, Open Area near Waiter's Cub.
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aspergillus niger 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Penicillium species 34%

Chrysosporium species 33%

Sterilia mycelia 33%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000204-3 **Lab Sample Number:** 20 0114-03
Sampling Location: 6th Fl, Ste. 601, Y. Askew's Cubicle
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%

Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 3 of 11
Job ID: 20 0114

Skyline V

Client Sample Number: JASK000204-4 **Lab Sample Number:** 20 0114-04
Sampling Location: 4th Fl, Ste. 403, E. Forbes' Office
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Chrysosporium species 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000204-5 **Lab Sample Number:** 20 0114-05
Sampling Location: 4th Fl, Ste. 401, in Hall at Pepsi Machine
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 4 of 11
Job ID: 20 0114

Skyline V

Client Sample Number:	JASK000204-6	Lab Sample Number:	20 0114-06
Sampling Location:	8th Fl, Ste. 810, Recpt. Area of L. DeLoach		
Date Collected:	2/4/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000204-7	Lab Sample Number:	20 0114-07
Sampling Location:	8th Fl, Ste., 810, Rm 8008		
Date Collected:	2/4/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated:	Penicillium species	50%
	Chrysosporium species	50%

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated:	Sterilia mycelia	100%
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Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 5 of 11
Job ID: 20 0114

Skyline V

Client Sample Number: JASK000204-8 **Lab Sample Number:** 20 0114-08
Sampling Location: 8th Fl, Ste. 808, Recpt. Area at E. Hemsath's Of.
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Black yeast 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000204-13 **Lab Sample Number:** 20 0114-09
Sampling Location: 9th Fl, Rm 9053
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 6 of 11
Job ID: 20 0114

Client Sample Number:	JASK000204-14	Lab Sample Number:	20 0114-10
Sampling Location:	9th Fl, Rm 9161		
Date Collected:	2/4/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated:	Penicillium species	50%
	Chaetomium species	25%
	Black yeast	10%

Date Analyzed: 2/10/00

Total FUNGAL Count: 70 cfu/m³

FUNGUS Isolated:	Penicillium species	70%
	Paecilomyces species	20%
	Sterilia mycelia	10%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 7 of 11
Job ID: 20 0114

Skyline V

Client Sample Number:	JASK000204-15	Lab Sample Number:	20 0114-11
Sampling Location:	1st Fl, Ste. 103 (BC2A Program Office), Rm 150		
Date Collected:	2/4/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 8 of 11
Job ID: 20 0114

Skyline V

Client Sample Number:	JASK000204-16	Lab Sample Number:	20 0114-12
Sampling Location:	1st Fl, Ste. 105 (DISA Counter Drug Of.)		
Date Collected:	2/4/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 150 cfu/m³

FUNGUS Isolated:	Penicillium species	95%
	Cladosporium species	5%

Date Analyzed: 2/10/00

Total FUNGAL Count: 98 cfu/m³

FUNGUS Isolated:	Penicillium species	79%
	Cladosporium species	7%
	Rhodotorula species	7%
	Yeast	7%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000204-17	Lab Sample Number:	20 0114-13
Sampling Location:	1st Fl, Ste. 107 (SSO), Open Area, Center		
Date Collected:	2/4/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 9 of 11
Job ID: 20 0114

Skyline V

Client Sample Number:	JASK000204-18	Lab Sample Number:	20 0114-14
Sampling Location:	1st Fl, Ste. 100 (Security), Rm 107		
Date Collected:	2/4/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Alternaria species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	JASK000204-19	Lab Sample Number:	20 0114-15
Sampling Location:	6th Fl, Ste. 602, Mr. Cole's Desk		
Date Collected:	2/4/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Cladosporium species 100%

Date Analyzed: 2/10/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Sterilia mycelia 50%

Alternaria species 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 10 of 11
Job ID: 20 0114

Skyline V

Client Sample Number: JASK000204-20 **Lab Sample Number:** 20 0114-16
Sampling Location: 4th Fl, Ste. 400, M. Brayleih Cubicle
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Alternaria species 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000204-21 **Lab Sample Number:** 20 0114-17
Sampling Location: 4th Fl, Ste. 400, M. Maloney's Office
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/4/00
Date Reported: 2/15/00
Page 11 of 11
Job ID: 20 0114

Client Sample Number: JASK000204-22 **Lab Sample Number:** 20 0114-18
Sampling Location: 4th Fl, Ste. 404, Rm 470, Rear
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: No Growth.

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000204-23 **Lab Sample Number:** 20 0114-19
Sampling Location: Outside Air (OA), Roof
Date Collected: 2/4/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications
1038 AIR, Stachybotrys Culture

Total FUNGAL Count: No Growth.

Date Analyzed: 2/10/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/10/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 1 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-01 **Lab Sample Number:** 20 0127-01

Sampling Location: 6th Floor, Suite 624, Room 635

Date Collected: 2/9/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 110 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Date Analyzed: 2/17/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%

Sterilia mycelia 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: JASK000209-02 **Lab Sample Number:** 20 0127-02

Sampling Location: 6th Floor, Suite 624, Reception Area, Room 650

Date Collected: 2/9/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Date Analyzed: 2/17/00

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Penicillium species 67%

Cladosporium species 33%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 2 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-03 Lab Sample Number: 20 0127-03
Sampling Location: 6th floor, Suite 638-640, Room 638, Reception
Date Collected: 2/9/00 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 49 cfu/m³

FUNGUS Isolated: Aspergillus fumigatus 72%
Penicillium species 14%
Cladosporium species 14%

Date Analyzed: 2/17/00

Total FUNGAL Count: 42 cfu/m³

FUNGUS Isolated: Aspergillus fumigatus 67%
Cladosporium species 33%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/9/00
Date Reported: 2/20/00
Page 3 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-04 Lab Sample Number: 20 0127-04
Sampling Location: 5th floor, Suite 538-542, Sam Brown's Office, Room 539
Date Collected: 2/9/19 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Aspergillus species 67%
Penicillium species 33%

Date Analyzed: 2/17/00

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated: Aspergillus species 75%
Cladosporium species 25%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 4 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-05 Lab Sample Number: 20 0127-05

Sampling Location: 5th floor, Suite 538-542, GME room

Date Collected: 2/9/19

Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Paecilomyces species 25%
Aspergillus fumigatus 25%

Date Analyzed: 2/17/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 50%
Aspergillus fumigatus 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 5 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-06 Lab Sample Number: 20 0127-06

Sampling Location: 6th floor, Suite 638-640, Room 636

Date Collecte 2/9/19 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus fumigatus 50%
Sterilia mycelia 50%

Date Analyzed: 2/17/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus fumigatus 50%
Cladosporium species 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: JASK000209-07 Lab Sample Number: 20 0127-07

Sampling Location: 1st floor, Skyline IV, Suite 110, Room 105, Karen Brown's

Date Collecte 2/9/19 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: No growth

Date Analyzed: 2/17/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Stachybotrys chartarum (atra) 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Project: Skyline V
1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 6 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-13 Lab Sample Number: 20 0127-08
Sampling Location: 5th floor, Randall Koran's Office, Suite 550-559
Date Collected: 2/9/19 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 21 cfu/m³

FUNGUS Isolated: Penicillium species 67%
Sterilia mycelia 33%

Date Analyzed: 2/17/00

Total FUNGAL Count: 42 cfu/m³

FUNGUS Isolated: Penicillium species 66%
Cladosporium species 17%
Sterilia mycelia 17%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 7 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-14 **Lab Sample Number:** 20 0127-09
Sampling Location: 5th Floor, Sherrell Kern's Cubicle, Suite 550-559
Date Collected: 2/9/19 **Volume/Area:** 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Results: Unable to quantitate due to nature of mucoraceous organism.

FUNGUS Isolated: Penicillium species
Rhizopus species

Date Analyzed: 2/17/00

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated: Penicillium species 75%
Rhizopus species 25%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 8 of 12
Job ID: 20 0127

Client Sample Number:	JASK000209-15	Lab Sample Number:	20 0127-10
Sampling Location:	5th F., Lt. Colonel Teresa Somnese, Suite 550-559		
Date Collected:	2/9/19	Volume/Area:	141.5 L
TEST REQUESTED:	1038 AIR, Stachybotrys Culture 1030 AIR, Total FUNGAL Count w/identifications		
Total FUNGAL Count:	21 cfu/m ³		
FUNGUS Isolated:	Penicillium species		50%
	Sterilia mycelia		50%
Date Analyzed:	2/17/00		
Total FUNGAL Count:	14 cfu/m ³		
FUNGUS Isolated:	Penicillium species		50%
	Sterilia mycelia		50%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	2/17/00		
Analyst:	Patricia R. Vestal, M.S., SM (ASCP)		

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Date Received: 2/9/00
Date Reported: 2/20/00
Page 9 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-16 Lab Sample Number: 20 0127-11

Sampling Location: 5th Floor, Suite 517, Sonya Mercurius

Date Collected: 2/9/19

Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 98 cfu/m³

FUNGUS Isolated: Aspergillus fumigatus 79%
Penicillium species 7%
Pithomyces species 7%
Sterilia mycelia 7%

Date Analyzed: 2/17/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Aspergillus fumigatus 50%
Alternaria species 50%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 10 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-17 Lab Sample Number: 20 0127-12

Sampling Location: 5th Floor, Suite 517, Mark McKenzie

Date Collecte: 2/9/19

Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 42 cfu/m³

FUNGUS Isolated: Penicillium species 34%
Aspergillus fumigatus 33%
Sterilia mycelia 33%

Date Analyzed: 2/17/00

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated: Aspergillus fumigatus 75%
Penicillium species 25%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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1046-00-0043

Date Received: 2/9/00
Date Reported: 2/20/00
Page 11 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-18 **Lab Sample Number:** 20 0127-13
Sampling Location: 5th Floor, Suite 500, M. Graves' Cubicle
Date Collected: 2/9/19 **Volume/Area:** 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aspergillus fumigatus 100%

Date Analyzed: 2/17/00

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Aspergillus species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: JASK000209-19 **Lab Sample Number:** 20 0127-14
Sampling Location: 5th Fl., Suite 500, Cubicle Area, Ms. Harrington
Date Collected: 2/9/19 **Volume/Area:** 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: Alternaria species 100%

Date Analyzed: 2/17/00

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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Date Received: 2/9/00
Date Reported: 2/20/00
Page 12 of 12
Job ID: 20 0127

Client Sample Number: JASK000209-20 Lab Sample Number: 20 0127-15
Sampling Location: Outside air, Roof
Date Collected: 2/9/19 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture
1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 77 cfu/m³

FUNGUS Isolated: Penicillium species 45%
Sterilia mycelia 36%
Cladosporium species 11%

Date Analyzed: 2/17/00

Total FUNGAL Count: 35 cfu/m³

FUNGUS Isolated: Cladosporium species 40%
Aspergillus niger 20%
Alternaria species 20%
Penicillium species 20%

Detection Limits: 7 cfu/m³

Date Analyzed: 2/17/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

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1046-00-0043

Date Received: 2/10/99
Date Reported: 2/21/00
Page 1 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-01 **Lab Sample Number:** 20 0133-01
Sampling Location: 6th Fl, Suite 638-640, N, AHU1, Room 638, Rec Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-02 **Lab Sample Number:** 20 0133-02
Sampling Location: 6th F, Suite 624, N, AHU1, Rec, Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/10/99
Date Reported: 2/21/00
Page 2 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-03 **Lab Sample Number:** 20 0133-03
Sampling Location: 6th F, Suite 602, S, AHU2, Entr Richey/Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: 10 cfu/in²

FUNGUS Isolated: Sterilia mycelia 100%

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-04 **Lab Sample Number:** 20 0133-04
Sampling Location: 6th F, Suite 601, S, AHU2, Y. Askew Cub S. Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 3 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-05 **Lab Sample Number:** 20 0133-05

Sampling Location: 4th F, Suite 400, S , AHU2, J. Thomas Sup Lvr

Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 1 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-06 **Lab Sample Number:** 20 0133-06

Sampling Location: 4th F, Suite 403, N , AHU1, E. Forbes Sup Lvr

Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/10/99

Date Reported: 2/21/00

Page 4 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-07 **Lab Sample Number:** 20 0133-07
Sampling Location: 4th F, Suite 401, N, AHU1, hall 36' E Pepsi Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-08 **Lab Sample Number:** 20 0133-08
Sampling Location: 4th F, Suite 404, N, AHU1, Cub 402C, Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 5 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-09 **Lab Sample Number:** 20 0133-09
Sampling Location: 8th F, Ste. 808, S., AHU2, Rec/Keegan Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-10 **Lab Sample Number:** 20 0133-10
Sampling Location: 8th F, Suite 810, S, AHU2, Rec/Deloach Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/10/99
Date Reported: 2/21/00
Page 6 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-11 **Lab Sample Number:** 20 0133-11
Sampling Location: 5th F, Ste 500-559, N , AHU1, Rec/Matthew Sup
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: 20 cfu/in²

FUNGUS Isolated: Rhizopus species 50%
Aspergillus niger 50%

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-12 **Lab Sample Number:** 20 0133-12
Sampling Location: 5th F, Ste 517, N , AHU1, Mercurius Sup Lvr
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/10/99
Date Reported: 2/21/00
Page 7 of 23
Job ID: 20 0133

Client Sample Number:	JASK000210-13	Lab Sample Number:	20 0133-13
Sampling Location:	5th F, Ste 500, S , AHU2, Szymanski Sup Lvr		
Date Collected:	2/10/00	Volume/Area:	1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 150 cfu/in²

FUNGUS Isolated:	Aspergillus species	66%
	Aspergillus niger	34%

Date Analyzed: 2/16/00

Total FUNGAL Count: 100 cfu/in²

FUNGUS Isolated:	Aspergillus species	100%
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Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 8 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-14 **Lab Sample Number:** 20 0133-14

Sampling Location: 5th F, Ste 537-544, N , AHU1, Rm 599, Sup Lvr

Date Collected: 2/10/00

Volume/Area: 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 30 cfu/in²

FUNGUS Isolated: Cladosporium species 66%
Aspergillus species 34%

Date Analyzed: 2/16/00

Total FUNGAL Count: 30 cfu/in²

FUNGUS Isolated: Cladosporium species 66%
Aspergillus species 34%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-15 **Lab Sample Number:** 20 0133-15

Sampling Location: 9th F, Rm 9182, S, AHU2, Supply Louver

Date Collected: 2/10/00

Volume/Area: 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/10/99
Date Reported: 2/21/00
Page 9 of 23
Job ID: 20 0133

1046-00-0043

Client Sample Number: JASK000210-16 **Lab Sample Number:** 20 0133-16
Sampling Location: 9th Floor, Conference Room, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-17 **Lab Sample Number:** 20 0133-17
Sampling Location: 9th F, Rm 9113, N, AHU1, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99
Date Reported: 2/21/00
Page 10 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-18 **Lab Sample Number:** 20 0133-18
Sampling Location: 9th R, Rm 9112, N, AHU1, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-19 **Lab Sample Number:** 20 0133-19
Sampling Location: 9th F, Rm 9116, N, AHU1, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" mx 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 40 cfu/in²

FUNGUS Isolated: Penicillium species 75%
Sterilia mycelia 25%

Date Analyzed: 2/16/00

Total FUNGAL Count: 30 cfu/in²

FUNGUS Isolated: Penicillium species 100%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Date Received: 2/10/99
Date Reported: 2/21/00
Page 11 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-20 **Lab Sample Number:** 20 0133-20
Sampling Location: 9th F, Room 9101, N , AHU1, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-21 **Lab Sample Number:** 20 0133-21
Sampling Location: 9th F, Rm 9121, N , AHU1, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

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1046-00-0043

Date Received: 2/10/99
Date Reported: 2/21/00
Page 12 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-22 **Lab Sample Number:** 20 0133-22
Sampling Location: 9th R, Rm 9128, N , AHU1, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-23 **Lab Sample Number:** 20 0133-23
Sampling Location: 9th F, Rm 9137, N , AHU1, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 13 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-24 **Lab Sample Number:** 20 0133-24

Sampling Location: 9th F, Rm 9150, S, AHU2, Supply Louver

Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-25 **Lab Sample Number:** 20 0133-25

Sampling Location: 9th F, Rm 9163, S, AHU2, Supply Louver

Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth.

Date Analyzed: 2/16/00

Total FUNGAL Count: No Growth.

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99
Date Reported: 2/21/00
Page 14 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-26 **Lab Sample Number:** 20 0133-26
Sampling Location: 9th F, Rm 9158, S, AHU2, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"
TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications
Total FUNGAL Count: No Growth.
Date Analyzed: 2/16/00
Total FUNGAL Count: No Growth.
Detection Limits: 10 cfu/in²
Date Analyzed: 2/16/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JASK000210-27 **Lab Sample Number:** 20 0133-27
Sampling Location: 9th F, Rm 9198, S, AHU2, Supply Louver
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"
TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count
Total FUNGAL Count: No Growth.
Date Analyzed: 2/16/00
Total FUNGAL Count: No Growth.
Detection Limits: 10 cfu/in²
Date Analyzed: 2/16/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: Skyline V

Date Received: 2/10/99
Date Reported: 2/21/00
Page 16 of 23
Job ID: 20 0133

1046-00-0043

Client Sample Number: JASK000210-30 **Lab Sample Number:** 20 0133-30
Sampling Location: AHU # 1, Filter Side of Coil Supply air System
Date Collected: 2/10/00 **Volume/Area:** 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 100 cfu/in²

FUNGUS Isolated:

Rhodotorula species	40%
Streptomyces species	30%
Sterilia mycelia	20%
Aureobasidium species	10%

Date Analyzed: 2/16/00

Total FUNGAL Count: 130 cfu/in²

FUNGUS Isolated:

Streptomyces species	69%
Sterilia mycelia	15%
Penicillium species	8%
Cladosporium species	8%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Certificate of Laboratory Analysis

Applied Environmental, Inc.
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Reston, VA 20191

Attn:

Project: Skyline V
1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 17 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-31 Lab Sample Number: 20 0133-31

Sampling Location: AHU1, Fan Side of Coil, Supply Air System

Date Collected: 2/10/00

Volume/Area: 1" x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 5400 cfu/in²

FUNGUS Isolated:	Rhodotorula species	87%
	Yeast	8%
	Cladosporium species	1%
	Penicillium species	1%
	Pithomyces species	1%

Date Analyzed: 2/16/00

Total FUNGAL Count: 6100 cfu/in²

FUNGUS Isolated:	Rhodotorula species	90%
	Yeast	3%
	Penicillium species	1%
	Cladosporium species	1%
	Sterilia mycelia	1%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: Skyline V

1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 18 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-32 Lab Sample Number: 20 0133-32

Sampling Location: AHU1, Axial Vane, Return Air System

Date Collected: 2/10/00

Volume/Area: 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 80 cfu/in²

FUNGUS Isolated:	Chaetomium species	38%
	Aspergillus species	25%
	Penicillium species	12%
	Epicoccum species	12%
	Cladosporium species	12%

Date Analyzed: 2/16/00

Total FUNGAL Count: 80 cfu/in²

FUNGUS Isolated:	Aspergillus species	63%
	Chaetomium species	27%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: Skyline V

1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 19 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-33 Lab Sample Number: 20 0133-33

Sampling Location: AHU1, Axial Vane, Return Air System

Date Collected: 2/10/00

Volume/Area: 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 70 cfu/in²

FUNGUS Isolated: Chaetomium species 86%
Aspergillus niger 14%

Date Analyzed: 2/16/00

Total FUNGAL Count: 60 cfu/in²

FUNGUS Isolated: Chaetomium species 66%
Cladosporium species 17%
Rhizopus species 17%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 20 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-34 **Lab Sample Number:** 20 0133-34

Sampling Location: AHU2, Filter Side of Coil, Supply Air System

Date Collected: 2/10/00

Volume/Area: 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 60 cfu/in²

FUNGUS Isolated:	Alternaria species	34%
	Yeast	17%
	Black yeast	17%
	Cladosporium species	16%
	Sterilia mycelia	16%

Date Analyzed: 2/16/00

Total FUNGAL Count: 90 cfu/in²

FUNGUS Isolated:	Sterilia mycelia	56%
	Alternaria species	11%
	Yeast	11%
	Cladosporium species	11%
	Penicillium species	11%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 21 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-35 **Lab Sample Number:** 20 0133-35

Sampling Location: AHu2, Fan Side of Coil, Supply Air System

Date Collected: 2/10/00

Volume/Area: 1" x 1"

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 6900 cfu/in²

FUNGUS Isolated:	Streptomyces species	56%
	Rhodotorula species	40%
	Cladosporium species	1%
	Sterilia mycelia	1%

Date Analyzed: 2/16/00

Total FUNGAL Count: 3800 cfu/in²

FUNGUS Isolated:	Streptomyces species	51%
	Rhodotorula species	43%
	Cladosporium species	1%
	Epicoccum species	1%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: Skyline V

1046-00-0043

Date Received: 2/10/99

Date Reported: 2/21/00

Page 22 of 23

Job ID: 20 0133

Client Sample Number: JASK000210-36 **Lab Sample Number:** 20 0133-36

Sampling Location: AHU2, Shaft Side Axial Vane, Return Air System

Date Collected: 2/10/00

Volume/Area: 1" x 1'

TEST REQUESTED: 1031 WIPE, Total FUNGAL Count w/Identifications
1037 WIPE, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: 10 cfu/in²

FUNGUS Isolated: Stachybotrys chartarum (atra)

100%

Date Analyzed: 2/16/00

Total FUNGAL Count: 30 cfu/in²

FUNGUS Isolated: Penicillium species

34%

Aspergillus species

33%

Streptomyces species

33%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

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Project: Skyline V
1046-00-0043

Date Received: 2/10/99
Date Reported: 2/21/00
Page 23 of 23
Job ID: 20 0133

Client Sample Number: JASK000210-37 **Lab Sample Number:** 20 0133-37

Sampling Location: AHU2, Motor Side Axial Vane, Return Air System

Date Collected: 2/10/00 **Volume/Area:** 1' x 1"

TEST REQUESTED: 1037 WIPE, Stachybotrys Culture & Total Fungal Count
1031 WIPE, Total FUNGAL Count w/identifications

Total FUNGAL Count: 190 cfu/in²

FUNGUS Isolated:	Penicillium species	42%
	Aspergillus niger	21%
	Cladosporium species	16%
	Stachybotrys chartarum (atra)	5%
	Chaetomium species	5%

Date Analyzed: 2/16/00

Total FUNGAL Count: 150 cfu/in²

FUNGUS Isolated:	Penicillium species	60%
	Aspergillus species	7%
	Rhizopus species	7%
	Aspergillus niger	7%
	Chaetomium species	7%

Detection Limits: 10 cfu/in²

Date Analyzed: 2/16/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

ATTACHMENT C

Description of Common Fungal Organisms

Fungi

***Alternaria* species**

The fungal species *Alternaria* is a worldwide outdoor mold that flourishes seasonally in warm and humid conditions. Colonies of *Alternaria* are found on textiles and fruits, especially tomatoes, and may be linked to Baker's asthma.

Aspergillus* species, *Aspergillus niger*, *Aspergillus ochraceus

Aspergillus is a fungal species which can cause a condition known as Hypersensitivity Pneumonitis syndrome (a lower lung, allergic-type condition) in susceptible individuals. Hypersensitivity Pneumonitis can occur in certain individuals who become "sensitized" to these organisms over a period of time. In most cases, adverse health consequences of exposure to these organisms are seen only in "hypersensitive" individuals. It has also been reported that non-viable cell products and VOCs are believed to be responsible for some adverse health effects. *Aspergillus niger* is considered an "opportunistic pathogen" (disease-causing agent). Normally, individuals have a high degree of immunity to this microbe. However, individuals whose immune systems are compromised by certain medical conditions are more susceptible to infection. The organism can cause a lung disease known as Aspergillosis (a fungal lung infection), and is the usual cause of a sinus infection known as otomycosis. *Aspergillus* is unique as it thrives in warm temperatures (>40°) and, therefore, its growth peaks with indoor heating (e.g., in autumn and winter). It is commonly culturable from house basements, bedding, house dust and raw textiles on upholstered furniture. Inhaled spores can lead to several well-defined diseases: allergic asthma, hypersensitivity pneumonitis, invasive aspergillosis, aspergilloma (fungus ball), and allergic bronchopulmonary aspergillosis.

***Aureobasidium* species**

Aureobasidium are fungi that thrive in moist environments, and are considered common environmental contaminants. Typically, they are not associated with BRI, but can be linked to hypersensitivity pneumonitis in susceptible individuals.

***Botrytis* species**

Botrytis is also an environmental fungal organism with no known adverse health effects. It is commonly isolated as a contaminant in environmental cultures.

***Chaetomium* species**

Chaetomium species are found on a variety of substrates containing cellulose, including paper and plant compost. These fungi are commonly identified as contaminants in clinical cultures, and have been occasionally implicated as allergens.

***Cladosporium* species**

The genus *Cladosporium* (also known as *Hormodendrum*) is the most commonly isolated fungus in the world, and is composed of 25 different species of mold that thrive in temperate zones throughout the world. Rain drops or moisture liberate spores from decaying leaves, which go on to produce velvety olive green, brown or greenish-grey

colonies. *Cladosporium* can readily be detected in homes with poor ventilation and around painted areas of moist window frames. Their spores have been found in some face creams, paints, commercial soil and textiles. *Cladosporium* spores can survive under refrigeration. Patients are commonly assessed for *Cladosporium* sensitivity using extracts from spores and mycelia of *Cladosporium herbarum*. *Cladosporium* species flourish outdoors, and are commonly found in indoor office environments and within air handling systems that introduce outside ventilation air to their buildings.

***Geotrichum* species**

Geotrichum species can cause geotrichosis, which is a rare infection that is known to have produced lesions in the lungs, mouth, intestines, vagina, and skin. Fungemia and disseminated infections have also been reported. *Geotrichum* is found as normal flora in humans and seems to cause disease only in compromised hosts.

***Hyalodendrum* species**

Hyalodendron species are fungi similar to *Cladosporium* which are commonly found outdoors on decaying wood and other organic materials. They are non-pathogenic in humans.

***Mucor* species**

Mucor species are fungi that are commonly found as contaminants in environmental cultures. They are occasionally associated with zygomycosis, predominantly in patients who are predisposed to disease by diabetes, immunosuppression, AIDS, severe burns, intravenous drug use, and malnutrition. Mucoracious species quickly cover agar surfaces with fluff resembling cotton candy. This frequently causes other organisms on a culture plate to become obscured, and therefore unable to be quantified.

***Penicillium* species**

Penicillium species are widespread in nature being found on fruits, vegetables, and other substrates that may provide nutriment. The *Penicillium* species can cause a condition known as Hypersensitivity Pneumonitis syndrome (a lower lung, allergic-type condition) in susceptible individuals. Hypersensitivity Pneumonitis can occur in certain individuals who become "sensitized" to the organism over a period of time. In most cases, adverse health consequences of exposure to this organism are seen only in "hypersensitive" individuals or those with compromised immune systems. It has also been reported that non-viable cell products and VOCs are believed to be responsible for some adverse health effects. The reference, Medically Important Fungi by D. Larone, Ph.D., states that *Penicillium* species are found in a variety of diseases in which its etiologic significance is uncertain. *Penicillium* has been known to cause keratitis (inflammation of the cornea) and external ear infections. Some strains of *Penicillium* produce toxins.

***Phoma* species**

Phoma species are commonly considered to be environmental fungal contaminants. They are occasional agents of phaeohyphomycosis, but are not typically associated with BRI.

***Rhizopus* species**

Rhizopus species have been found to be etiologic agents of zygomycosis, predominantly in clinical patients who are predisposed to disease by diabetes, immunosuppression, AIDS, severe burns, intravenous drug abuse, malnutrition, etc. They are commonly isolated as environmental contaminants in laboratory cultures, and quickly cover agar surfaces with dense growth.

***Rhodotorula* species**

Rhodotorula species is a yeast-like fungus that is commonly isolated as a contaminant in clinical laboratory cultures. It occurs on damp organic materials and is found outdoors in temperate regions. It is not uncommon to find this organism in HVAC systems in buildings using outdoor air in their ventilation systems. It can infect particularly susceptible individuals during the terminal stages of debilitating diseases such as carcinoma and bacterial endocarditis.

***Stachybotrys* species**

Identification of *Stachybotrys chartarum* can occur when organic building materials become wet and stay wet for extended periods of time. The fact that this fungus was identified in the air is cause for concern, because the airborne fungus can result in exposures leading to adverse health effects when inhaled by building occupants.

Stachybotrys chartarum most commonly grows on damp cellulose, and is found in high concentrations in agricultural products such as hay or straw. In indoor environments, it may be found in areas with severe water leaks, and grows readily on the paper backing component of gypsum wallboard in wall cavities and in other environments where conditions for growth are suitable. It can also enter buildings from outdoor sources such as occupants and ventilation systems utilizing outside air for ventilation. *Stachybotrys chartarum* has been recently implicated in an outbreak of pulmonary hemorrhage in infants in the Cleveland area in flooded homes. *Stachybotrys chartarum* produces strong mycotoxins (toxic byproduct given off during growth). These mycotoxins have been linked to adverse health effects including contact irritation that can lead to mucous membrane irritation including sore throat and irritation of the conjunctiva around the eye, cough, rhinitis, burning sensations in the mouth, throat, and nasal passages, and cutaneous (skin) irritation at the points of toxin contact. Nosebleeds are also common, and tracheal bleeding has been occasionally reported.

Sterilia mycelia

Sterilia mycelia are fungal organisms that do not sporulate, and are therefore non-reproductive. Sterile hyphae are molds that do not produce conidia (spores), and that are not able to be speciated as a result. They are non-pathogenic to humans, and have not been implicated in BRI.

Ustilago species

Ustilago species are fungi that are parasitic on the seeds and flowers of many cereals and grasses, and are commonly isolated as contaminants in environmental cultures. They are seldom implicated in human disease, but may be inhaled and subsequently isolated from sputum specimens.

Yeast

Yeasts are the most common fungi isolated in the clinical laboratory. They are ubiquitous in the environment and also live as normal inhabitants in our bodies. Yeasts are considered to be opportunistic pathogens, causing disease in patients with compromised immune systems, with intravascular catheters, with diabetes mellitus, intravenous drug abusers, and those on extended antibiotic treatments. They may be allergenic to susceptible individuals if present in sufficient quantities.

Skyline V roof replacement: (COMPLETED)

Roof replacement is 100% complete.

Carpet replacement and painting through out the 9th floor under lease agreement:

GSA, FCA, DISA, and CES agreed new carpet will be installed and all walls will be painted through out the entire 9th floor. The first phase of carpet & paint installation began on June 23. Seven phases have been coordinated with all parties.

If you have any questions or comments please contact the Tina America at the FCA Office at 681-7711 and/or Carl Battenfeld, GSA Field Office at 756-6270.

Thank you, Tina America, & Carl Battenfeld

Summary of Skyline V, 9th floor

All restoration items on the 9th floor of Skyline V have been COMPLETED.

Skyline IV, Room 105: (COMPLETED)

CES's Environmental Group conducted additional investigating in Skyline IV, Room 105. Rooms were cleaned and renovated the weekend of 03/24/00.

Remediation Status of Affected Rooms on 9th floor:

Room 9181 (Conference Room): (COMPLETED)

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- Replaced base board
- New ceiling tiles
- Cleaned drapes
- Installed new blinds
- Light fixture repaired
- Column re-skimmed & painted
- Window replaced
- Caulked new window
- New carpet installed
- Drapes hung
- Touched up paint
- Replaced 20 conference chairs
- Carpet repaired

Rooms 9182, 9187A, 9187B, 9188, 9189: (COMPLETED)

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- Replaced cove base
- Installed new blinds
- Replaced stained ceiling tiles
- Occupant relocated after 2nd test results
- identified *Stachybotrys chartarum*
- 9182 drywall & painted
- 9182 new carpet installed

Rooms 9182, 9187A, 9187B, 9188, 9189 continued: (COMPLETED)

- 9182 additional exploratory conducted 4-6-00
- 9182 additional cleaning conducted 4-6-00
- 9182 additional testing conducted 4-7-00
- 9182 removal of drywall 4-6-00
- 9182 ergonomic chair delivered & in storage
- 9182 drywall replaced
- 9182 ceiling tiles replaced

Room 9113: (COMPLETED)

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- Installed new blinds

Room 9173: (COMPLETED)

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- New ceiling tiles
- Removed valence
- Installed new blinds
- Built-in cabinets removed
- New cabinets installed
- Removed vinyl wall covering (not to be re-installed)
- New carpet installed
- Mr. Miller was moved back into his office 4-4-00
- Installed new valance

Room 9191: (COMPLETED)

Done

- Cleaned window frame
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Installed new blinds
- Cleaned window frame

Room 9199: (COMPLETED)

Done

- Removed vinyl wall covering
- Patched and painted drywall
- Removed drapes
- Installed new valance
-

Rooms 9201, 9112 (the real 9112), 9110, 9180, 9180A: (COMPLETED)

Done

- Cleaned with bleach solution
- Additional IAQ samples taken
- 9201A patched/painted holes in drywall
- 9110 ergonomic chair delivered & in storage

Room 9121 (copier room): (COMPLETED)

Done

- Replaced stained ceiling tile
- Stripped & waxed floor

Room 9131: (COMPLETED)

Done

- Window frame cleaned

Room 9095 (New roof leak on 03/17/00 & 03/27/00): (COMPLETED)

Done

(2nd time):

- Replaced ceiling tiles
- Removed drywall
- Sealed roof above 9095
- Installed new drywall (patch & paint)
- DISA to provided list of damages to CES
- Cement deck treated prior to carpet install
- Windows caulked
- Drywall painted
- UPS replaced
- Monitor replaced

Rooms 9135, 9136B, 9137, 9139, 9141, 9145, 9152: (COMPLETED)

Done

- Caulked windows
- Caulked windows again after 2nd leak
- 9135 replaced drywall near window
- 9135 painted

Room 9207 (New roof expansion joint leak on 3/21/00): (COMPLETED)

Done

- Roof expansion joint repaired
- Replaced ceiling tiles

Room 9157 (2nd leak (roof drainage pipe) 03/27/00): (COMPLETED)

Done

- Pipe replaced 03/29
- Area cleaned
- Replaced light fixture lens

Room 9209 (roof expansion joint): (COMPLETED)

Done

- Installed plate over expansion joints

Room 9143: (COMPLETED)

- Room 9143 was re-cleaned on 4-6-00.
- 2nd test results were negative

Stairwell #4 (roof leak at smoke control fan 03/27/00): (COMPLETED)

Done

- Smoke control fan temporarily caulked
- Installed new cap over curb
- Repair walls inside stairwell between 9th & 7th
- Repair ceiling

Return Air Fan Chamber: (COMPLETED)

Done

- Cleaned with bleach solution

Skyline V roof replacement: (COMPLETED)

Roof replacement is 100% complete.

Carpet replacement and painting through out the 9th floor under lease agreement:

GSA, FCA, DISA, and CES agreed new carpet will be installed and all walls will be painted through out the entire 9th floor. The first phase of carpet & paint installation began on June 23. Seven phases have been coordinated with all parties.

If you have any questions or comments please contact the Tina America at the FCA Office at 681-7711 and/or Carl Battenfeld, GSA Field Office at 756-6270.

Thank you, Tina America, & Carl Battenfeld



11800 Sunrise Valley Drive, Suite 1200
Reston, Virginia 20191
(703) 648-0822 Fax (703) 648-0575

FAX TRANSMITTAL

TO: Ms. Trish L. Gretskey *fax 202.708.6618*
GSA Safety, Environment, and Fire Protection
Total Pages 7

FROM: Francis W. McGrail IV

DATE: April 25, 2000 *[Signature]*

RE: Skyline V Follow-up Microbial Sampling Results, Rooms 9143 and 9182

Attached are the results that we discussed. Call me if you have questions.

Call FK (703) 756-6289
J. Skatz FK (703) 769-1063
Dennis Whitworth 820-3978
Jina America 681-7780

9143/9182

No S. atra !

No Aspergillus niger !

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191

Attn:
Project: Skyline V Follow-up
1046-00-0198

Date Received: 4/7/00
Date Reported: 4/14/00
Page 1 of 4
Job ID: 20 0436

Client Sample Number: SFFM000407-01 **Lab Sample Number:** 20 0436-01
Sampling Location: Room 9143
Date Collected: 4/7/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
Total FUNGAL Count: 63 cfu/m³

FUNGUS Isolated:

Cladosporium species	44%
Penicillium species	22%
Paecilomyces species	12%
Mucor species	11%
Sterilia mycelia	11%

Detection Limits: 7 cfu/m³

Date Analyzed: 4/12/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: SFFM000407-02 **Lab Sample Number:** 20 0436-02
Sampling Location: Room 9143
Date Collected: 4/7/00 **Volume/Area:** 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count

Results: Unable to quantitate due to nature of mucoraceous organism.
Unable to determine the presence/absence of Stachybotrys due to overgrowth of interfering fungus.

FUNGUS Isolated: Mucor species
Detection Limits: 7 cfu/m³

Date Analyzed: 4/12/00
Analyst: Ann Atkinson, B.S., MT (ASCP)

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191

Attn:
Project: Skyline V Follow-up
1046-00-0198

Date Received: 4/7/00
Date Reported: 4/14/00
Page 2 of 4
Job ID: 20 0436

Client Sample Number:	SFFM000407-03	Lab Sample Number:	20 0436-03
Sampling Location:	Room 9182		
Date Collected:	4/7/00	Volume/Area:	141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications			
Total FUNGAL Count:	42 cfu/m ³		
FUNGUS Isolated:	Cladosporium species		50%
	Geotrichum species		33%
	Yeast		17%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	4/12/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	SFFM000407-04	Lab Sample Number:	20 0436-04
Sampling Location:	Room 9182		
Date Collected:	4/7/00	Volume/Area:	141.5 L
TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count			
Results: No Stachybotrys isolated.			
Total FUNGAL Count:	35 cfu/m ³		
FUNGUS Isolated:	Cladosporium species		40%
	Geotrichum species		40%
	Sterilia mycelia		20%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	4/12/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191

Attn:
Project: Skyline V Follow-up
1046-00-0198

Date Received: 4/7/00
Date Reported: 4/14/00
Page 3 of 4
Job ID: 20 0436

Client Sample Number: SFFM000407-05 Lab Sample Number: 20 0436-05
Sampling Location: Outside, Front Entrance to Skyline V
Date Collected: 4/7/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 550 cfu/m³

FUNGUS Isolated:

Cladosporium species	70%
Penicillium species	8%
Alternaria species	7%
Sterilia mycelia	6%
Paecilomyces species	3%

Detection Limits: 7 cfu/m³

Date Analyzed: 4/12/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: SFFM000407-06 Lab Sample Number: 20 0436-06
Sampling Location: Outside, Front Entrance to Skyline V
Date Collected: 4/7/00 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count

Results: No Stachybotrys isolated.

Total FUNGAL Count: 540 cfu/m³

FUNGUS Isolated:

Cladosporium species	64%
Sterilia mycelia	21%
Penicillium species	7%
Paecilomyces species	1%
Alternaria species	1%

Detection Limits: 7 cfu/m³

Date Analyzed: 4/12/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191

Attn:
Project: Skyline V Follow-up
1046-00-0198

Date Received: 4/7/00
Date Reported: 4/14/00
Page 4 of 4
Job ID: 20 0436

Client Sample Number: SFFM000407-07 Lab Sample Number: 20 0436-07

Sampling Location: Blank

Date Collected: 4/7/00

Volume/Area: 0 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth

Detection Limits: N / A

Date Analyzed: 4/12/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: SFFM000407-08 Lab Sample Number: 20 0436-08

Sampling Location: Blank

Date Collected: 4/7/00

Volume/Area: 0 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth

Detection Limits: N / A

Date Analyzed: 4/12/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

STACHY ASPERGILLUS
9182 & 9143

4/7/00

10¹⁵
Am

Room 9143

Unoccupied, Furniture only - no personal
effects - 3/4 carpet, gyp walls, set 2x2 w/ shw.
Room reported to have been cleaned last night
94P5000

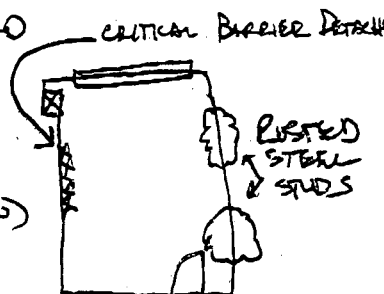
10²⁰
Am

Room 9182

Poly flap over door sealed, Room is negative
w.r.t. corridor - Cut flap to gain entry
with respect to

Room reported to have been gutted

Evidence of water damage below
window - water stained deposit at base
on concrete wall (absent above window)



Steel framing studs on wall bordering conf rm adjacent
show extensive rust to 10" up from floor

Poly critical barrier to office on other side present &
detached from concrete ceiling slab.

Gyp on conf rm side above SC grid & g insul below
remains

Steel grid remains w/ light fixture - wall to corridor remains
inside gyp walls removed, except above grid on conf rm side

9182 cont'd

covered

Supply traffer covered w/ duct tape

? UV box CCI 9-74 w/1.5 kw elect heat
remains - duct riser remains

GSA/NCR/WPX

(AUTO)

THE FOLLOWING FILE(S) ERASED

FILE	FILE TYPE	OPTION	TEL NO.	PAGE	RESULT
007	MEMORY TX		97037566289	07/07	OK

ERRORS

1) HANG UP OR LINE FAIL 2) BUSY 3) NO ANSWER 4) NO FACSIMILE CONNECTION

9143/9182
No data
No data
No data

820,3928
681-7780
Dennis
Wilbur
Jiva America

GSA/NCR/WPX

(AUTO)

THE FOLLOWING FILE(S) ERASED

FILE	FILE TYPE	OPTION	TEL NO.	PAGE	RESULT
008	MEMORY TX		97037691063	07/07	OK

ERRORS

1) HANG UP OR LINE FAIL 2) BUSY 3) NO ANSWER 4) NO FACSIMILE CONNECTION

9143/9182
 No. 8. atva
 No. 8. atva
 No. 8. atva

8200 3928
 681-7780
 Viva America
 Viva America
 Viva America

GSA/NCR/WPX

(AUTO)

THE FOLLOWING FILE(S) ERASED

FILE	FILE TYPE	OPTION	TEL NO.	PAGE	RESULT
009	MEMORY TX		97038203978	07/07	OK

ERRORS

1) HANG UP OR LINE FAIL 2) BUSY 3) NO ANSWER 4) NO FACSIMILE CONNECTION

9143/9182
 No. 8. atna
 No. 8. atna
 No. 8. atna

820,3928
 68-7780
 Viva America
 Dennis
 Whitworth

GSA/NCR/WPX

(AUTO)

THE FOLLOWING FILE(S) ERASED

FILE	FILE TYPE	OPTION	TEL NO.	PAGE	RESULT
010	MEMORY TX		97036817780	07/07	OK

ERRORS

1) HANG UP OR LINE FAIL 2) BUSY 3) NO ANSWER 4) NO FACSIMILE CONNECTION

9143/9182
 No. 8. atea
 No. 8. atea
 No. 8. atea

9143/9182
 No. 8. atea
 No. 8. atea

820,3928
 691-7780

date: 04/26/00

to: Joe Balinas

Phone Number:

fax number: (⁷⁰³~~202~~) 692- 6250

Pgs (incl cover): (20)

fax

From Trish Gretskey, IH

GSA Safety & Environmental (WPMOX)

(202) 708 5254

(202) 708 -6618 fax

Enclosed are 3 reports for follow-up microbial sampling per your e-mail. All reports have also been forwarded to Tina America (DOD/DISA), CE Smith, and the GSA SDT.



"Joe Balinas" <jcapablanca@usa.net> on 04/26/2000 03:19:38 PM

To: trish.gretsky@gsa.gov
cc: creelh@ncr.disa.mil, michael.leakan@na.amedd.army.mil, joe.balinas@na.amedd.army.mil

Subject: REQ. MOST CURRENT IAQ RESULTS OF SKYLINE 5.

Hello Trish -- Need to get a copy of your most recent IAQ studies (to include velometry and balometry per req. Dr. Leakan) and any other information as to the exact flood sights.

We are scheduled to present our findings on the result of the IAQ survey tomorrow at 1330 with Helen Creel at Skyline 5.

OUR NEW FAX NO. 692-6250 PLS. PROVIDE US WITH THE INFOS BEFORE THE MEETING IF POSSIBLE. THANKS //JOE.

trish.gretsky@gsa.gov wrote:

>
> We have received laboratory results for resampling in those rooms where
> Stachybotrys atra was previously detected. Those rooms were cleaned on
> 3/10-11. There was not previously nor during the most recent round of
> sampling "high levels" S. atra detected. The resampling indicated all
> rooms were clean (zero concentrations of S. atra detected) with one
> exception. Low levels (7 cfu/m3) remained in Room 9182. I do not have
> electronically transmitted lab sheets. If you provide me a fax number, I
> will send them to you.
>
> There have been some additional leaks on the 9th floor. CE Smith, GSA, and
> DOD are all working together to get the issue resolved as quickly as
> possible.
>
>
>
> From: "Joe Balinas" <jcapablanca@usa.net> AT internet on 03/30/2000 09:06
> PM
>
> To: Patricia L. Gretsky/WPY/RW/GSA/GOV
> cc: Michael.Leakan@NA.AMEDD.ARMY.MIL AT internet@ccMTA-GEMS-MTA-01,
> Joe.Balinas@NA.AMEDD.ARMY.MIL AT internet@ccMTA-GEMS-MTA-01
>
> Subject: Follow Up IAQ Studies
>
>
>
> Hello Trish,
>
> Do you have the most recent update/follow-up IAQ/Stach studies? One of
> the 9th floor staff member recently relocated mentioned a persistent "high

> level" of Stach. readings still in the 9th floor. Also mentioned was the
> persistent flooding and leakage from the roof.

>
> Appreciate any update you have for us. VR//Joe.

>
>
>

> Get free email and a permanent address at <http://www.netaddress.com/?N=1>

>
>
>
>
>
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>
>
>
>

Get free email and a permanent address at <http://www.netaddress.com/?N=1>

Carl Px (703) 756-6289

J. Shatz (703) 749-1063

Mike Castle 235-2357

Dennis Whitworth 820-3978

Tina America 681-7780

FAX TRANSMITTAL

TO: Ms. Patricia L. Gretskey fax 202.708.6618
GSA Safety, Environment, and Fire Protection
Total Pages 5

FROM: Francis W. McGrail IV 

DATE: April 7, 2000

RE: Skyline V Microbial Sampling Results from 3/24/00

Call me if you have any questions. I'll be forwarding over a quick letter with these results and the results of the sampling from 3/12 as soon as I can.

*Specimens for samples from 9095 (after leak
was discovered). No Stachybotrys detected*

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191
Attn:
Project: 1046-00-0043

Date Received: 3/24/00
Date Reported: 3/30/00
Page 4 of 4
Job ID: 20 0363

Client Sample Number:	SFFM000324-07	Lab Sample Number:	20 0363-07
Sampling Location:	Blank		
Date Collected:	3/24/00	Volume/Area:	0 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: No Growth

Detection Limits: N/A

Date Analyzed: 3/29/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	SFFM000324-08	Lab Sample Number:	20 0363-08
Sampling Location:	Blank		
Date Collected:	3/24/00	Volume/Area:	0 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth

Detection Limits: N/A

Date Analyzed: 3/29/00

Analyst: Ann Atkinson, B.S., MT (ASCP)



Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191
Attn:
Project: 1046-00-0043

Date Received: 3/24/00
Date Reported: 3/30/00
Page 1 of 4
Job ID: 20 0363

Client Sample Number:	SFFM000324-01	Lab Sample Number:	20 0363-01
Sampling Location:	Room 9095		
Date Collected:	3/24/00	Volume/Area:	141.5 L
TEST REQUESTED:	1030 AIR, Total FUNGAL Count w/identifications		
Total FUNGAL Count:	49 cfu/m ³		
FUNGUS Isolated:	Sterilia mycelia		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	3/29/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Client Sample Number:	SFFM000324-02	Lab Sample Number:	20 0363-02
Sampling Location:	Room 9095		
Date Collected:	3/24/00	Volume/Area:	141.5 L
TEST REQUESTED:	1038 AIR, Stachybotrys Culture & Total Fungal Count		
Results:	No Stachybotrys isolated.		
Total FUNGAL Count:	42 cfu/m ³		
FUNGUS Isolated:	Sterilia mycelia		100%
Detection Limits:	7 cfu/m ³		
Date Analyzed:	3/29/00		
Analyst:	Ann Atkinson, B.S., MT (ASCP)		

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191
Attn:
Project: 1046-00-0043

Date Received: 3/24/00
Date Reported: 3/30/00
Page 3 of 4
Job ID: 20 0363

Client Sample Number:	SFFM000324-05	Lab Sample Number:	20 0363-05
Sampling Location:	Room 9101 (control)		
Date Collected:	3/24/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 14 cfu/m³

FUNGUS Isolated: Sterilia mycelia 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 3/29/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	SFFM000324-06	Lab Sample Number:	20 0363-06
Sampling Location:	Room 9101 (control)		
Date Collected:	3/24/00	Volume/Area:	141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count

Results: No Stachybotrys isolated.

Total FUNGAL Count: 56 cfu/m³

FUNGUS Isolated: Sterilia mycelia 75%

Aspergillus species 25%

Detection Limits: 7 cfu/m³

Date Analyzed: 3/29/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191
Attn:
Project: 1046-00-0043

Date Received: 3/24/00
Date Reported: 3/30/00
Page 2 of 4
Job ID: 20 0363

Client Sample Number:	SFFM000324-03	Lab Sample Number:	20 0363-03
Sampling Location:	Outside, Front Building Entrance		
Date Collected:	3/24/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 180 cfu/m³

FUNGUS Isolated:	Sterilia mycelia	88%
	Cladosporium species	12%

Detection Limits: 7 cfu/m³

Date Analyzed: 3/29/00

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number:	SFFM000324-04	Lab Sample Number:	20 0363-04
Sampling Location:	Outside, Front Building Entrance		
Date Collected:	3/24/00	Volume/Area:	141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count

Results: No Stachybotrys isolated.

Total FUNGAL Count: 130 cfu/m³

FUNGUS Isolated:	Sterilia mycelia	63%
	Aspergillus species	21%
	Geotrichum species	16%

Detection Limits: 7 cfu/m³

Date Analyzed: 3/29/00

Analyst: Ann Atkinson, B.S., MT (ASCP)



11800 Sunrise Valley Drive, Suite 1200
Reston, Virginia 20191

(703) 648-0822
FAX (703) 648-0575

FAX TRANSMITTAL

TO: Ms. Patricia L. Gretskey fax 202.708.6618
GSA Safety, Environment, and Fire Protection Total Pages 7

FROM: Francis W. McGrail IV *FW McGrail*

DATE: March 24, 2000

RE: Laboratory Results, Follow-up Microbial Sampling, Skyline V

Per our discussion!

L. Slaty (703) 769-1063

Mike Castle (703) 235-2357

Derius Whitworth (703) 820-3978 fx

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191

Attn:
Project: 1046-00-0043

Trish Gretskey

Date Received: 3/13/00

Date Reported: 3/20/00

Page 2 of 6

Job ID: 20 0268

Client Sample Number: SKYFM000312-03 Lab Sample Number: 20 0268-03
Sampling Location: Rm 9182
Date Collected: 3/12/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated: Sterilia mycelia 50%
Stachybotrys chartarum (atra) 25%
Penicillium species 25%

Detection Limits: 7 cfu/m³

Date Analyzed: 3/20/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: SKYFM000312-04 Lab Sample Number: 20 0268-04
Sampling Location: Rm 9182
Date Collected: 3/12/00 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count

Results: No Stachybotrys isolated.

Detection Limits: 7 cfu/m³

Date Analyzed: 3/20/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: SKYFM000312-05 Lab Sample Number: 20 0268-05
Sampling Location: Rm 9112
Date Collected: 3/12/00 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count

Results: No Stachybotrys isolated.

Detection Limits: 7 cfu/m³

Date Analyzed: 3/20/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191

Attn:
Project: 1046-00-0043
Trish Gretskey

Date Received: 3/13/00
Date Reported: 3/20/00
Page 4 of 6
Job ID: 20 0268

Client Sample Number: SKYFM000312-09 Lab Sample Number: 20 0268-09
Sampling Location: Rm 9180A
Date Collected: 3/12/00 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count

Results: No Stachybotrys isolated.

Detection Limits: 7 cfu/m³

Date Analyzed: 3/20/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: SKYFM000312-10 Lab Sample Number: 20 0268-10
Sampling Location: Rm 9201
Date Collected: 3/12/00 Volume/Area: 141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count

Results: No Stachybotrys isolated.

Detection Limits: 7 cfu/m³

Date Analyzed: 3/20/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: SKYFM000312-11 Lab Sample Number: 20 0268-11
Sampling Location: Rm 9143
Date Collected: 3/12/00 Volume/Area: 141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 7 cfu/m³

FUNGUS Isolated: *Aspergillus niger* 100%

Detection Limits: 7 cfu/m³

Date Analyzed: 3/20/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191

Attn:
Project: 1046-00-0043
Trish Gretskey

Date Received: 3/13/00
Date Reported: 3/20/00
Page 1 of 6
Job ID: 20 0268

Client Sample Number:	SKYFM000312-01	Lab Sample Number:	20 0268-01
Sampling Location:	Rm 9181 Conference Room		
Date Collected:	3/12/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: 28 cfu/m³

FUNGUS Isolated:	Sterilia mycella	50%
	Penicillium species	25%
	Mucor species	25%

Detection Limits: 7 cfu/m³

Date Analyzed: 3/20/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number:	SKYFM000312-02	Lab Sample Number:	20 0268-02
Sampling Location:	Rm 9181 Conference Room		
Date Collected:	3/12/00	Volume/Area:	141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count

Results: No Stachybotrys isolated.

Detection Limits: 7 cfu/m³

Date Analyzed: 3/20/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191

Attn:
Project: 1046-00-0043
Trish Gretskey

Date Received: 3/13/00
Date Reported: 3/20/00
Page 3 of 6
Job ID: 20 0268

Client Sample Number: SKYFM000312-06 Lab Sample Number: 20 0268-06
Sampling Location: Rm 9180
Date Collected: 3/12/00 Volume/Area: 141.5 L
TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications
Total FUNGAL Count: 7 cfu/m³
FUNGUS Isolated: Sterilia mycelia 100%
Detection Limits: 7 cfu/m³
Date Analyzed: 3/20/00
Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: SKYFM000312-07 Lab Sample Number: 20 0268-07
Sampling Location: Rm 9180
Date Collected: 3/12/00 Volume/Area: 141.5 L
TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count
Results: No Stachybotrys isolated.
Detection Limits: 7 cfu/m³
Date Analyzed: 3/20/00
Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number: SKYFM000312-08 Lab Sample Number: 20 0268-08
Sampling Location: Rm 9110
Date Collected: 3/12/00 Volume/Area: 141.5 L
TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count
Results: No Stachybotrys isolated.
Detection Limits: 7 cfu/m³
Date Analyzed: 3/20/00
Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191

Attn:
Project: 1046-00-0043
Trish Gretskey

Date Received: 3/13/00
Date Reported: 3/20/00
Page 6 of 6
Job ID: 20 0268

Client Sample Number:	SKYFM000312-14	Lab Sample Number:	20 0268-14
Sampling Location:	Blank		
Date Collected:	3/12/00	Volume/Area:	0 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/identifications

Total FUNGAL Count: No Growth.

Detection Limits: N/A

Date Analyzed: 3/20/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number:	SKYFM000312-15	Lab Sample Number:	20 0268-15
Sampling Location:	Blank		
Date Collected:	3/12/00	Volume/Area:	0 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count

Total FUNGAL Count: No Growth.

Detection Limits: N/A

Date Analyzed: 3/20/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Certificate of Laboratory Analysis

Applied Environmental, Inc.
11800 Sunrise Valley Dr., Suite 1200
Reston, VA 20191

Attn:
Project: 1046-00-0043

Trish Gretskey

Date Received: 3/13/00

Date Reported: 3/20/00

Page 5 of 6

Job ID: 20 0268

Client Sample Number:	SKYFM000312-12	Lab Sample Number:	20 0268-12
Sampling Location:	Outside		
Date Collected:	3/12/00	Volume/Area:	141.5 L

TEST REQUESTED: 1030 AIR, Total FUNGAL Count w/Identifications

Total FUNGAL Count: 130 cfu/m³

FUNGUS isolated:	Cladosporium species	52%
	Sterilia mycelia	40%
	Alternaria species	4%
	Paecilomyces species	4%

Detection Limits: 7 cfu/m³

Date Analyzed: 3/20/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

Client Sample Number:	SKYFM000312-13	Lab Sample Number:	20 0268-13
Sampling Location:	Outside		
Date Collected:	3/12/00	Volume/Area:	141.5 L

TEST REQUESTED: 1038 AIR, Stachybotrys Culture & Total Fungal Count

Results: No Stachybotrys isolated.

Detection Limits: 7 cfu/m³

Date Analyzed: 3/20/00

Analyst: Patricia R. Vestal, M.S., SM (ASCP)

GSA/NCR/WPX

(AUTO)

THE FOLLOWING FILE(S) ERASED

FILE	FILE TYPE	OPTION	TEL NO.	PAGE	RESULT
020	MEMORY TX		97032352357	07/07	OK

ERRORS

1) HANG UP OR LINE FAIL 2) BUSY 3) NO ANSWER 4) NO FACSIMILE CONNECTION

note Carter (03) 235-2357
David Whitworth (03) 820-3978 R



New York City Department of Health
Bureau of Environmental & Occupational Disease Epidemiology

Guidelines on Assessment and Remediation of Stachybotrys Atra in Indoor Environments

Based on a panel discussion
May 7, 1993
District Council 37 AFSCME
125 Barclay Place
New York, New York 10007

Sponsored by:
New York City Department of Health
New York City Human Resources Administration
Mount Sinai-Irving J. Selikoff
Occupational Health Clinical Center

Executive Summary

On May 7, 1993, the New York City Department of Health (DOH), the New York City Human Resources Administration (HRA), and the Mt. Sinai Occupational Health Clinic convened an expert panel on "Stachybotrys atra (SA) in Indoor Environments". The purpose of the panel was to develop policies for medical and environmental evaluation and intervention to address SA contamination. This document summarizes the panel's recommendations.

Contamination of indoor air by SA is thought to be rare. SA is generally found on materials with a high cellulose content (such as fiberboard, gypsum board, dust and lint) that become chronically moist or water damaged due to excessive humidity, water leaks, condensation, infiltration, or flooding. Such conditions are often accompanied by multiple mold contaminants and other air quality problems. Areas growing SA or other microbial contaminants must be repaired as rapidly as possible in order to ensure a healthy environment. Specific methods of assessing and remediating SA contamination must be based on the extent of visible contamination and underlying damage. The simplest and most expedient remediation that properly and safely removes SA contamination should be used. Repair of the defects that led to water accumulation should be done as quickly as possible. Contamination of a discrete area -- which is likely to characterize the majority of areas where SA is found -- can be assessed and remediated by building maintenance personnel, using the protocols described in this document. Widespread contamination, particularly if heating, ventilating, air conditioning (HVAC) systems or large occupied spaces are involved, require assessment and remediation by personnel with training and experience handling microbial contaminated material. In order to prevent contamination from recurring, underlying defects causing moisture buildup and water damage must be addressed. Effective communication with building occupants is an essential component of all remedial efforts.

SA in buildings may cause or exacerbate allergic type symptoms (such as wheezing, chest tightness,

shortness of breath), especially in persons who have a history of hypersensitivity diseases (such as asthma, hypersensitivity pneumonitis, and severe sinusitis). The attack rate (percentage of occupants who develop these reactions) is generally low. Individuals with persistent health problems should be referred for medical evaluation by a physician trained in occupational or environmental medicine and knowledgeable about exposures to fungal contaminants. Decisions about removing individuals from an affected area must be based on the results of such medical evaluation, and be made on a case by case basis. Except in cases of widespread SA contamination, building-wide evacuation is not indicated.

In summary, prompt removal of contaminated material and infrastructural repair is the primary response to SA contamination in buildings. Emphasis should be placed on preventing contamination through proper building and HVAC system maintenance and prompt repair of water damage.

Introduction

Stachybotrys atra (SA) is a greenish-black fungus that can grow on materials with a high cellulose and low nitrogen content (such as fiberboard, gypsum board, dust and lint) that become moist or water-damaged, due to excessive humidity, chronic leaks, condensation, infiltration or flooding. The prevalence of SA contamination in indoor environments is unknown because buildings are not routinely tested for its presence. Recently, several cases of SA contamination in NYC buildings were reported to the New York City Department of Health (DOH).

Currently there are no Federal, State or City regulations or guidelines for evaluating potential health effects of SA contamination and remediation. To address this regulatory gap, DOH, HRA, and the Mount Sinai Occupational Health Clinic convened an expert panel on "Stachybotrys Atra (SA) in indoor environments" on May 7, 1993. The purpose of the panel was to develop policies for medical and environmental evaluation and intervention to address SA contamination. The panel consisted of seven authorities on the subject: Donald Ahearn and Sidney Crow from Georgia State University, Bruce Jarvis from the University of Maryland, William Sorenson from the National Institute for Occupational Safety and Health (NIOSH) (Morgantown, WV), Philip Morey from Clayton Environmental Consultants, Robert Vogt from the Centers for Disease Control and Prevention (CDC) (Atlanta) and David Miller from Agriculture Canada (Ottawa).

This document, summarizing the recommendations for evaluating and remediating microbial contamination, is based on the May 7, 1993 panel discussion. It was developed in cooperation with the Mt. Sinai Occupational Health Clinic and New York City Department of Health. The document contains a discussion of potential health effects and necessary medical evaluation; an outline of the criteria utilized to trigger an environmental assessment; protocols for initial inspections, sampling, environmental monitoring and the evaluation of data; remediation and cleanup procedures and a discussion of risk communication strategy. The criteria and protocols are divided into four sections: I. Health Issues; II. Environmental assessment; III. Remediation; and IV. Hazard Communication.

I. Health Issues:

A. Health Effects

SA can produce several toxic chemicals called trichothecene mycotoxins. These mycotoxins are known to be toxic to both humans and farm animals exposed to significant quantities. Initially the toxic effects of the mold were seen in farm animals that had eaten contaminated hay or grain. Farm workers also experienced health effects (dermatitis, blood and immune

system disorders) from handling contaminated material. A recent evaluation of several tricothecenes by the International Agency for Research on Cancer (IARC) found no evidence that they cause cancer.

There have been only a few documented cases of health problems from indoor exposure to SA. In general, the intensity of exposure and health effects from SA in the indoor environment are much less severe than those which were experienced by farm animals and workers.

If SA spores are released into the air, there is a potential for allergic, respiratory or immunologic symptoms to develop or become exacerbated. These conditions include: asthma, hypersensitivity pneumonitis, allergic rhinitis, dermatitis, sinusitis and conjunctivitis. It is thought that these diseases are mediated by an immune response to SA (or other environmental agents). Many of the related symptoms are non-specific, but debilitating, such as discomfort, inability to concentrate and fatigue. Presently, it is not known whether long-term indoor exposure to airborne SA increases the risk of certain chronic respiratory diseases. In one reported case of indoor exposure, residents experienced cold and flu symptoms, diarrhea, headaches, fatigue, rashes and other symptoms. These symptoms disappeared after all of the contaminated duct work, insulation, and ceiling material was replaced.

B. Association between SA in buildings and health effects

Health risk cannot be predicted based simply on the presence of SA in building materials as indicated by bulk sampling results. In order for humans to be exposed indoors, spores must be released into the air and inhaled. Also, it appears that the symptoms listed above are not likely to develop in all persons exposed at levels likely to be found in buildings. The attack rate (percentage of persons who develop symptoms) is generally low. At the present time, "safe" (or "unsafe") exposure levels have not been established.

C. Medical Evaluation

Individuals with persistent health problems should be referred to practitioners trained in occupational/environmental medicine or related specialties and knowledgeable about these types of exposures. Some physicians are beginning to conduct tests for biological markers (eg. in blood samples) of SA exposure. However, such tests are not readily available or interpretable and should not be routinely used in a public health or primary care setting. For example, a negative test result does not conclusively "prove" that there has been no exposure to SA.

D. Medical Removal

Persons with asthma, hypersensitivity pneumonitis, severe allergies, sinusitis, immune suppression, or other chronic inflammatory lung diseases appear to be at greater risk for developing health problems associated with SA (as well as other fungi which are commonly found in water-damaged areas). Such persons may need to be removed from the affected area until remediation and clearance testing, if required, are completed. Decisions about medical removal must be based on the results of a clinical assessment by a trained occupational/environmental health practitioner. Evacuation of an entire area or facility is generally not warranted, except in cases of widespread contamination, particularly involving

a ventilation system.

II. Environmental Assessment

A. Criteria for Initial Inspection

Reports about potential SA contamination in buildings should be followed up to ascertain whether a site inspection is warranted. The criteria for conducting an initial inspection include:

1. presence of visible mold;
2. evidence of water damage;
3. symptoms which are consistent with an allergic or toxic response to SA (eg. respiratory illness, rashes and chronic fatigue) and are severe enough as judged by medical documentation to result in lost work days.

B. Inspection Procedures

If visible mold, water damage, and occupants exhibiting related symptoms serious enough to result in lost work days are present, a site inspection should be conducted. The results of all site inspections should be compiled into a written report, and made available to the building owner, employer and employee representatives in the affected areas. Such an inspection should be conducted according to the following protocol:

1. Visual Inspection.
Visual inspection is the most important initial step in identifying a possible contamination problem. Visual identification of black mold in chronically-wet areas is considered to be a possible indicator of SA. Ceiling tiles, gypsum wall board, cardboard, paper, and other cellulosic surfaces should be given careful attention during visual inspection. The extent of any water damage and mold growth should be evaluated as this will be important in determining remedial strategies. Ventilation systems should also be visually checked, particularly for damp filters.
2. Bulk Sampling
 - a. If only a limited area is affected (i.e. all or part of an area that is approximately 30 square feet or less), the water damage is the result of a known occurrence, and no occupants are experiencing symptoms, then bulk (or other sampling) is not required. Remediation (as described under Remediation, Section A) should proceed without further evaluation, under the assumption that SA or (other fungal contaminants) are present.
 - b. Bulk samples should only be used to document the presence and extent of SA if extensive areas are affected, for example if visible mold occurs on areas larger than one wall board panel and water damage is a chronic problem, or if occupants are experiencing symptoms which may be related to SA exposure.
 - c. When bulk sampling is required, designated personnel should collect bulk samples from appropriate areas (eg. damp, moldy cellulose-derived material) by scraping surface materials into a clean ziploc plastic bag or by stripping the suspect surface with vinyl acetate tape.

3. Air Monitoring

- a. Air sampling for SA should not be part of a routine assessment. This is because air sampling methods for SA are prone to false negative results and therefore cannot be used to rule out contamination. In addition, when the size of the affected area is small or moderate, decisions about appropriate remediation strategies can be made on the basis of visual inspection and bulk sampling.
- b. Air monitoring may be required if there is evidence from visual inspection or bulk sampling that ventilation systems may be contaminated. The purpose of such air monitoring is to assess the extent of contamination throughout a building.
- c. If air monitoring is conducted, personnel conducting the sampling must be trained in proper air sampling methods for microbial contaminants.

C. Evaluation of Environmental Data

1. Analysis

- a. Documented quality control in the laboratories used for analysis of the bulk and air samples is necessary. SA is easily missed if other species are present and microscopic identification of the spores requires considerable expertise. These services are not routinely available from commercial laboratories. The laboratory director should be familiar with the literature concerning SA. A list of approved laboratories is available from the New York State Department of Health (518) 474-7413.
- b. Samples should also be analyzed for the presence of other common indoor microbial contaminants.
- c. Both indoor and outdoor air samples from nearby areas without signs of contamination should be collected and compared.

2. Evaluation criteria

- a. Bulk sampling: Sampling results in excess of 1 colony forming unit per gram should be considered positive. Surfaces that were sampled and found to be contaminated with SA need to be remediated, as described in Section III.
- b. Air monitoring:
 1. Concentrations of mold in indoor air which exceed concentrations in outdoor air should be considered positive. Remediation of surfaces and general cleaning is required, as described in Section III.
 2. Airborne concentrations of 103-104 cfu/m³ or greater require immediate evacuation of all occupants.

III. Remediation

Different levels of containment are necessary depending on the extent of the contamination problem. In all situations, the underlying cause of water accumulation must be rectified or the problem will recur. There must be a mechanism in place for ensuring an immediate response to these problems. Clean up should be conducted when the affected area is unoccupied. In all remediations, a routine follow-up inspection at 6-12 months or sooner if visible mold

contamination or water damage recurs should be conducted. Emphasis should be on ensuring proper repair of the building infrastructure, so that water damage and moisture buildup do not recur.

Four different levels of abatement, as described below, are identified, based on the extent of SA contamination.

A. Level I: Small Isolated Areas (2 sq. ft or less)

1. Example: ceiling tiles
2. Cleanup can be conducted by regular building maintenance staff. Such persons must receive training from a qualified individual on proper clean up methods, protection, and potential health hazards, and should be free from asthma, allergy and immune suppressive disorders. Gloves and a half face respirator should be worn. A full respiratory protection program, in accordance with 29 CFR 1910.134 is required.
3. Contaminated absorbent material should be removed in a sealed plastic bag
4. Surrounding areas should be cleaned with household bleach.
5. Special containment or evacuation measures are not necessary.

B. Level II: Larger Isolated Areas (2 - approximately 30 sq. feet)

1. Example: individual dry wall panels.
2. Cleanup can be conducted by regular building maintenance staff. Such persons must receive training from a qualified individual on proper clean up methods, protection, and potential health hazards, and should be free from asthma, allergy and immune suppressive disorders. Gloves and a half face respirator should be worn. A full respiratory protection program, in accordance with 29 CFR 1910.134 is required.
3. Surrounding material should be covered with plastic sheets and tape before removal.
4. Contaminated absorbent material should be removed in a sealed plastic bag
5. Surrounding areas should be cleaned with household bleach.

C. Level III: Large Scale Remediations(1) (more than 30 square feet)

1. Example: More than one wall board panel in an area which cannot be isolated from personnel.
2. Personnel trained in the handling of hazardous materials are necessary.
3. Containment of the affected area is required
 - a. Complete isolation of work area from occupied spaces using plastic sheeting sealed with duct tape (including openings, fixtures and HVAC components) is

- required.
 - b. A high efficiency particulate air (HEPA) exhausted negative air unit is required.
 - c. Airlocks and decontamination room are needed for exit from work area.
4. Contaminated material should be removed in double-sealed plastic bags.
 5. The work area must be HEPA vacuumed prior to the removal of isolation barriers.
 6. Clean up workers should wear:
 - a. Full-face respirators with HEPA cartridges or powered air purifying respirators
 - b. Disposable protective clothing, head gear, foot covering, gloves
 7. Air monitoring:
 - a. should be conducted during remediation to determine if spores are escaping during remediation and prior to removal of isolation barriers to assess the efficacy of the remediation.
 - b. should be conducted after large scale remediation, to determine its effectiveness and whether and area is safe for symptomatic persons to reoccupy. If post-remediation air samples indicate the presence of SA, even in minor amounts, further investigation of possible sources is required.

D. Level IV: Remediation of HVAC Systems

1. Personnel trained in the handling of hazardous materials are required for remediation of HVAC systems
2. Containment of the affected area is required
 - a. Complete isolation of work area from occupied spaces using plastic sheeting sealed with duct tape (including openings, fixtures and other HVAC components) is required.
 - b. A high efficiency particulate air (HEPA) exhausted negative air unit is required.
 - c. Airlocks and decontamination room are needed for exit from work area.
3. Contaminated material should be removed in double-sealed plastic bags.
4. The work area must be HEPA vacuumed prior to the removal of isolation barriers.
5. Clean up workers should wear:
 - a. Full-face respirators with HEPA cartridges or powered air purifying respirators
 - b. Disposable protective clothing, head gear, foot covering, gloves
6. If SA is present in settled dust removal with a HEPA equipped vacuum and subsequent damp wiping is recommended.
7. Air monitoring:

- a. should be conducted during remediation to determine if spores are escaping during remediation and prior to removal of isolation barriers to assess the efficacy of the remediation.
 - b. should be conducted after large scale remediation, to determine its effectiveness and whether an area is safe for symptomatic persons to reoccupy. If post-remediation air samples indicate the presence of SA, even in minor amounts, further investigation of possible sources is required.
8. Growth supporting material should be removed from ducts with a HEPA vacuum, where practical, if not removal of the affected component of the HVAC system is required.
9. Contaminated material should be disinfected prior to removal. Decisions concerning the type of disinfection should be made by a qualified individual, based on the extent of the growth supporting material. Decisions as to disinfection must be based on the extent of the growth substrate in the ducts. There are numerous "biocides" such as quaternary ammonium compounds (e.g. dimethylbenzyl ammonium chloride) that are employed routinely for disinfection and cleaning surfaces, particularly in hospitals and laboratories. Some of these biocides are recommended by manufacturers for use with cooling coils and condensation pans. In fact, the biocides are essential for maintaining the system. Household bleach is often recommended and can be used to clean coils. Chlorine dioxide or ozone are used for disinfecting inside of ducts.

Potentially toxic substances such as chlorine dioxide or ozone that are currently used for disinfecting duct work should not be used when the building is inhabited. Also, sufficient time should be allowed for the disinfectant to dissipate. These substances, however do have a short half life. As to whether they would be efficacious or not would depend upon the extent of the contamination and circumstances of application. As a safety factor it may be advisable to disinfect molded material within a duct system prior to cleaning.
10. The causes of SA accumulation and/or growth must be identified and corrective action taken.

IV. Hazard Communication

When SA is found, occupants in the affected area(s) should be notified of its presence by the building owner and the employer. Notification should include the a description of the remedial measures to be taken and a timetable for completion. Group meetings held before and after remediation with full disclosure of plans and results can be an effective communication mechanism. Some individuals may require separate counseling. They should be encouraged to seek medical advice from a qualified occupational/environmental health practitioner if they are concerned about continuing health problems. Individuals seeking medical attention should be provided with a copy of all inspection results and interpretation to give to their medical practitioners.

Conclusion

In summary, prompt removal of contaminated material and infrastructural repair must be the primary response to SA contamination in buildings. Emphasis should be placed on preventing contamination through proper building maintenance and prompt repair of water damaged areas.

Chronic exposure to airborne SA poses a risk of debilitating health effects caused by irritative and allergic reactions. This risk is compounded by exposure to additional molds and other pollutants usually found in buildings contaminated by SA. Laboratory tests for immune markers associated with SA exposure are not helpful at this time. Research should be pursued to refine such tests and characterize them more fully.

The simplest and most expedient remediation that properly and safely removes SA from buildings should be used. This includes prompt removal, cleaning of contaminated sites and repair of the defects that led to water accumulation. Widespread contamination poses much larger problems that must be addressed on a case-by-case basis in accordance with published guidelines for remediation. Effective communication with building occupants is an essential component of all remedial efforts. Individuals with persistent health problems should be referred to physicians competent in evaluating health effects of microbial exposures.

(1)Morey PR. Microbial contamination in buildings: precautions during remediation activities. 1992

December 1999


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Edith L. Toms

04/06/2000 05:29 PM

To: TC Hairston/WPD/RW/GSA/GOV@GSA
cc: Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA, John Knight/WPD/RW/GSA/GOV@GSA, Douglas G. Benton/WPD/RW/GSA/GOV@GSA

Subject: Re: Charles E. Smith "Show Cause Notice" Skyline V roof leaks 

As I discussed with TC early this week, the attached letter is fine if you want to go that way. However, from the documents I have seen, the prior cure notices and the show cause notice that was sent only addressed the fungus issues in the most cursory fashion. (Am I misinformed in this? Have prior cure notices specific to this issue been sent?) Sending an addendum now will be inflammatory and problematic, because it will seem to imply that we are dissatisfied with actions subsequent to the last show cause and if so - really- why are we sending another show cause?? Why not terminate? If C.E.Smith is being cooperative right now - a better course of action may be to send a cure notice summarizing conversations and work completed to date specific to the fungus issues, detailing the results expected and by when, and asking for a plan of remedial action, including the method and timing of retesting they will use. The response must be in writing from them by a date certain. The difference is that the show cause implies that termination is imminent. A cure letter documents a failure and establishes an outside date to remedy. From the last report I heard, it seemed folks thought Smith was responding appropriately.

Trish, realistically, how much more time do they need?? If it's short, this needs to go out very quickly. Doug, I am not here tomorrow, but the last letter can serve as a starting point. Also, the basic format of the prior cure notices is fine, with the additional level of detail discussed above. But make sure it comes from the CO to the Lessor's authorized representative...

Hope this is helpful. I will be in Monday.


Edith

TC Hairston



TC Hairston
04/05/2000 12:48 PM

To: Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA, Edith L. Toms/WL/RW/GSA/GOV@GSA
cc: John Knight/WPD/RW/GSA/GOV@GSA, Douglas G. Benton/WPD/RW/GSA/GOV@GSA

Subject: Re: Charles E. Smith "Show Cause Notice" Skyline V roof leaks 

Trish, so everything is done regarding the Stachybotrys, with the exception of these two (2) rooms correct???? And what is the count currently at, and where do we want it to be???? And how much time do we want to give them to correct it????

Patricia L. Gretskey 04/05/2000 09:54 AM




Patricia L. Gretskey

04/05/2000 09:54 AM

To: Douglas G. Benton/WPD/RW/GSA/GOV@GSA, TC Hairston/WPD/RW/GSA/GOV@GSA, Michael J. Castle/WPD/RW/GSA/GOV@GSA, Robert D. Armstrong/WPD/RW/GSA/GOV@GSA, Carl W. Battenfeld/WPD/RW/GSA/GOV@GSA

cc:

Subject: Re: Charles E. Smith "Show Cause Notice" Skyline V roof leaks 

Did the addendum letter go out to CE Smith requesting them to clean the 2 rooms? Since reviewing the attachment below (which I had no changes if I haven't already said so- TC) I have received questions on what is expected given the recent test results. I have talked to both Mike and Carl indicating CE Smith needs to do whatever it takes to get Rm. 9182 to a point where we get no Stachybotrys showing up. Something also has to be done with 9143 because the Aspergillus count remains the same even after cleaning has been done. I am sending this e-mail out to everyone again only because I have now received a phone call from John Shatz with the same question (where do we go from here? what is expected?etc.) Do I need to put something in writing? Let me know please
DOUGLAS G. BENTON


DOUGLAS G. BENTON

03/29/2000 02:56 PM

Sent by: Douglas G. Benton

To: TC Hairston/WPD/RW/GSA/GOV@GSA, Edith L. Toms/WL/RW/GSA/GOV@GSA, Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA, John Knight/WPD/RW/GSA/GOV@GSA

cc:

Subject: Re: Charles E. Smith "Show Cause Notice" Skyline V roof leaks 

Here is an addendum to the first letter to address the results just in on stachybotrys testing at Sky 5. We need to keep the pressure on Smith to get this all taken care of, this requires he prove to GSA the building is clean, we have been proving to him at GSA expense the building is not clean of stachybotrys and aspergillus.

Please review and give comment or approval by e-mail so TC can get this out asap, thanks



ShowCauseNotice - Sky 5 Adden
TC Hairston



TC Hairston
03/29/2000 01:59 PM

To: Douglas G. Benton/WPD/RW/GSA/GOV@GSA

cc:

Subject: Charles E. Smith "Show Cause Notice" Skyline V roof leaks

Doug, here is a copy of the letter hand delivered to Ralph Silverman on March 28, 2000.



ShowCauseNotice.d

● Patricia L. Gretskey

04/11/2000 03:54 PM

To: Doug Benton, Carl W. Battenfeld/WPD/RW/GSA/GOV, Michael J. Castle/WPD/RW/GSA/GOV, Donald L. Burns/WPD/RW/GSA/GOV, TAmerica@osd.pentagon.mil, SRyan@osd.pentagon.mil, craig.gerardi@charlesesmith.com

cc:

Subject: Skyline V- Rm. 9143

I had a conversation last week with John Shatz (GSA Safety & CES's Environmental Group) as to how to approach this room where low concentrations of *Aspergillus niger* were detected. Attached is a brief description of the microorganism. I suggested it would be prudent to do another investigation and cleaning within the room. *A. niger* is associated with a water incursion episode and being that it is on the 9th floor, a floor which has experienced repeated water incursion coupled with a heightened awareness of mold issues, it was a proper course of action.

This particular organism should not be treated as a *Stachybotrys* case. It is considered to be an opportunistic pathogen- an organism that affects individuals with immune compromised systems such as someone undergoing chemotherapy. A healthy individual would not expect to experience any adverse health problems. Consequently, the "zero" tolerance applied to *Stachybotrys* isn't applicable here.

We don't have the 3rd round of results in yet (results expected in 1-1 1/2 weeks). If the *A. niger* is again detected, I assume the levels will once again be at low concentration. CE Smith made a good faith effort at correcting the situation by thoroughly cleaning the room twice. I understand the room has essentially been vacant for a period of time now. My recommendation is that if results indicate this organism is still present, the person who is moved into the room not be an immune compromised individual. If complaints are expressed after the individual has been in the space, I would recommend providing copies of reports to his/her physician and compare health symptoms being experienced with the health symptoms associated with *A. niger*.

Please feel free to contact me at (202) 708-5254.



A.niger.doc

Summary of Skyline V, 9th floor update as of 4/10/00:

Due to the high winds and heavy rainfall on 4-8-00, Tina America contacted DISA Security in Skyline IV and requested a walk-thru of the 9th floor to ensure there was no water infiltration. DISA Security reported to Tina America that no water infiltration was discovered.

Carl Battenfield (GSA), Tina America (FCA) & Craig Geradi (CES) conducted the daily tour of the 9th floor. The status report is updated as follows:

Skyline IV, Room 105: (COMPLETED)

CES's Environmental Group conducted additional investigating in Skyline IV, Room 105. Rooms were cleaned and renovated the weekend of 03/24/00.

Remediation Status of Affected Rooms on 9th floor:

Room 9181 (Conference Room):

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- Replaced base board
- New ceiling tiles
- Cleaned drapes
- Installed new blinds
- Light fixture repaired
- Column re-skimmed & painted
- Window replaced
- Caulked new window

Needs to be done

- New carpet (carpet onsite – pending cleaning/demo of 9182)
- Replace 20 conference chairs (on order)
- Hang drapes

Rooms 9182, 9187A, 9187B, 9188, 9189:

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- Replaced cove base
- Installed new blinds
- Replaced stained ceiling tiles
- Occupant relocated after 2nd test results identified *Stachybotrys chartarum*
- Additional exploratory conducted 4-6-00
- Additional cleaning conducted 4-6-00
- Additional testing conducted 4-7-00
- Removal of drywall 4-6-00

Needs to be done

- 9182 replace ergonomic chair (on order)
- Drywall/Paint & Carpet

Room 9113: (COMPLETED)

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- Installed new blinds

Room 9173:

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- New ceiling tiles
- Removed valence
- Installed new blinds
- Built-in cabinets removed
- New cabinets installed
- Removed vinyl wall covering (not to be re-installed)
- New carpet installed
- Mr. Miller was moved back into his office 4-4-00

Needs to be done

- Install new valance (ordered)
- Clean exterior window (**scheduled 4-5-00**)

Room 9191: (COMPLETED)

Done

- Cleaned window frame
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Installed new blinds
- Cleaned window frame

Room 9199:

Done

- Removed vinyl wall covering
- Patched and painted drywall
- Removed drapes

To be done

- Install new valance (ordered)

Rooms 9201, 9112 (the real 9112), 9110, 9180, 9180A:

Done

- Cleaned with bleach solution
- Additional IAQ samples taken

To be done

- 9110 replace ergonomic chair (on order)
- 9201A patch/paint holes in drywall

Room 9121 (copier room): (COMPLETED)

Done

- Replaced stained ceiling tile

Room 9131: (COMPLETED)

Done

- Window frame cleaned

Room 9095 (New roof leak on 03/17/00 & 03/27/00):

Done

(2nd time):

- Replaced ceiling tiles
- Removed drywall
- Sealed roof above 9095
- Installed new drywall (patch & paint)
- DISA to provided list of damages to CES
- Cement deck treated prior to carpet install
- Windows caulked
- Drywall painted

To be done

- Replace one UPS (on order)
- Replace one computer monitor (on order)
- Clean window bulkhead

Rooms 9135, 9136B, 9137, 9139, 9141, 9145, 9155 (New window leak on 3/21/00): (COMPLETED)

Done

- Caulked windows

Room 9207 (New roof expansion joint leak on 3/21/00):

Done (COMPLETED)

- Roof expansion joint repaired
- Replaced ceiling tiles

Room 9157 (2nd leak (roof drainage pipe) 03/27/00):

Done (COMPLETED)

- Pipe replaced 03/29
- Area cleaned
- Replaced light fixture lens

Room 9209 (roof expansion joint):

To be done

- Install plate over expansion joints (on order)

Room 9183 & 9143 (4-4-00):

DISA reported leaks in room 9183 and “somewhere” near Ms. Creel’s office, to FCA on 4-4-00. FCA immediately contacted GSA and CES. When CES, GSA, & FCA arrived at the site, no leaks were found. In room 9183 a “dry” water stain was visible on the drywall. The occupant of the room was unable to determine the length of time the stain had been there. CES investigated the area around the stain, to include above the ceiling and all areas were completely dry. It was also discovered that the report of a leak near Ms. Creel’s office was a matter of miscommunication. The issue regarding room 9143 was what is planned in regards to the Aspergillus detected on the 2nd IAQ test. GSA Safety & CES’s Environmental Group are planning to discuss and agree on corrective actions for that room.

Room 9143:

Room 9143 was re-cleaned on 4-6-00.

Stairwell #4 (roof leak at smoke control fan 03/27/00):

Done

- Smoke control fan temporarily caulked
- Installed new cap over curb
- Repair walls inside stairwell between 9th & 7th

To be done

- Repair ceiling

Return Air Fan Chamber: (COMPLETED)

Done

- Cleaned with bleach solution

Skyline V roof replacement:

Penthouse and South side roofs are complete. Roof replacement is continuing on the north roof. Second layer of waterproofing material is installed. Full completion (installation of insulation, filter material and rock ballast) is expected within one to two weeks, pending weather conditions and availability of materials.

Skyline IV and VI roof replacements:

CES awarded roof contracts the week of 03/27/00. A construction work schedule was delivered to GSA & FCA on 4-4-00. Roofers began setting up work site on Skyline IV roof on 4-4-00.

Carpet replacement and painting through out the 9th floor under lease agreement:

03/27/00 - GSA, FCA, DISA, and CES agreed on new carpet installation and paint through out the entire 9th floor will be scheduled.

If you have any questions or comments please contact the Tina America at the FCA Office at 681-7711 and/or Carl Battenfeld, GSA Field Office at 756-6270.

Thank you, Tina America, & Carl Battenfeld

Summary of Skyline V, 9th floor update as of 3/30/00:

Carl Battenfield (GSA), Tina America (FCA) & Bonnie Muth (CES) toured the 9th floor again the morning of 3/30/00. The window in the conference room was replaced on 3-29-00. Although a new rubber gasket is in place, GSA, FCA and CES agreed the window should be caulked to ensure it is weather tight. The pipe in room 9157 was repaired but the area around the site needs to be cleaned up (vacuumed and dusted) and the light fixture lens still needs to be replaced or cleaned. The ceiling tiles in room 9207 still needs to be replaced. The windows along the courtyard near 9095 were re-caulked yesterday (additional work around the same windows will be completed today). A musty odor is still lingering in the area of 9095. A bleach solution is to be used on the cement floor prior to carpet installation scheduled for this weekend. The roof expansion joint above 9094 on the Skyline V side is sealed with a waterproof membrane. The Skyline IV side of the roof expansion joint will be resealed during the scheduled roof replacement of Skyline IV. A detailed cleaning of the 9th floor is scheduled for tonight between the hours of 6:00 – 10:00 pm. This cleaning will include wiping down the base boards, detailed vacuuming (behind doors, etc.), thorough dusting, wiping down horizontal surfaces (window ledges, etc.). This cleaning does not require packing or movement of items in rooms, we only advised that the desks be straighten and personal items be removed. Chairs have been ordered for the conference and several private offices and are expected to be delivered within the first two weeks of April. The occupant in room 9182 was relocated in order to conducted additional exploratory and cleaning of room.

Skyline IV, Room 105:

CES's Environmental Group conducted additional investigating in Skyline IV, Room 105. Rooms were cleaned and renovated the weekend of 03/24/00.

Remediation Status of Affected Rooms on 9th floor:

Room 9181 (Conference Room):

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- Replaced base board
- New ceiling tiles
- Cleaned drapes
- Installed new blinds
- Light fixture repaired
- Column re-skimmed & painted
- Window replaced

Needs to be done

- New carpet
- Replace 20 conference chairs
- Caulk new window
- Hang drapes

Rooms 9182, 9187A, 9187B, 9188, 9189:

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- Replaced cove base
- Installed new blinds
- Replaced stained ceiling tiles
- Occupant relocated after 2nd test results identified *Stachybotrys chartarum*

Needs to be done

- 9182 replace ergonomic chair
- 9182 additional exploratory required
- 9182 additional cleaning required
- 9182 additional testing required
- 9182 possible removal of drywall

Room 9113: (COMPLETE)

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- Installed new blinds

Room 9173:

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- New ceiling tiles
- Removed valence
- Installed new blinds
- Built-in cabinets removed
- New cabinets installed
- Removed vinyl wall covering (not to be re-installed)

Needs to be done

- New carpet
- Clean exterior window
- Install new valance (ordered)

Room 9191: (COMPLETED)

Done

- Cleaned window frame
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Installed new blinds
- Cleaned window frame

Room 9199 (Not to be done until Mr. Miller moves back to 9173):

To be done

- Remove vinyl wall covering
- Drywall patch and paint
- Remove drapes
- Install new valance (ordered)

Rooms 9201, 9112 (the real 9112), 9110, 9180, 9180A:

Done

- Cleaned with bleach solution
- Additional IAQ samples taken

To be done

- 9110 replace ergonomic chair

Room 9121 (copier room): (COMPLETED)

Done

- Replaced stained ceiling tile

Room 9131: (COMPLETED)

Done

- Window frame cleaned

Room 9095 (New roof leak on 03/17/00 & 03/27/00):

Done

(2nd time):

- Replaced ceiling tiles
- Removed drywall
- Sealed roof above 9095
- Installed new drywall (patch & paint)

To be done

- DISA to provide list of damages
- Replace one UPS
- Replace one computer monitor
- New carpet installed
- Paint drywall
- Treat cement deck prior to carpet install
- Clean window bulkhead
- Finish caulking windows

Rooms 9135, 9136B, 9137, 9139, 9141, 9145, 9155 (New window leak on 3/21/00): (COMPLETED)

Done

- Caulked windows

Room 9207 (New roof expansion joint leak on 3/21/00):

Done

- Roof expansion joint repaired

To be done

- Replace ceiling tiles

Room 9157 (2nd leak (roof drainage pipe) 03/27/00):

Done

- Pipe replaced 03/29

To be done

- Clean area
- Replace or clean light fixture lens

Room 9209 (roof expansion joint):

To be done

- Install plate over expansion joints

Stairwell #4 (roof leak at smoke control fan 03/27/00):

Done

- Smoke control fan temporarily caulked

To be done

- Install new cap over curb
- Repair ceiling
- Repair walls inside stairwell between 9th & 7th

Return Air Fan Chamber:

Done

- Cleaned with bleach solution

Skyline V roof replacement:

Penthouse and South side roofs are complete. Roof replacement is continuing on the north roof. Second layer of waterproofing material is installed. Full completion (installation of insulation, filter material and rock ballast) is expected within two to three weeks, pending weather conditions and availability of materials.

Skyline IV and VI roof replacements:

CES awarded roof contracts the week of 03/27/00. A construction work schedule to follow.

Carpet replacement and painting through out the 9th floor under lease agreement:

03/27/00 - GSA, FCA, DISA and CES agreed on new carpet installation and paint through out the entire 9th floor will be scheduled.

If you have any questions or comments please contact the Tina America at the FCA Office at 681-7711 and/or Carl Battenfeld, GSA Field Office at 756-6270.

Thank you, Tina America & Carl Battenfeld

● Patricia L. Gretskey

03/31/2000 10:07 AM

To: "Joe Balinas" <jcapablanca@usa.net> AT internet@ccMTA-GEMS-MTA-01
cc:

Subject: Re: Follow Up IAQ Studies

We have received laboratory results for resampling in those rooms where Stachybotrys atra was previously detected. Those rooms were cleaned on 3/10-11. There was not previously nor during the most recent round of sampling "high levels" S. atra detected. The resampling indicated all rooms were clean (zero concentrations of S. atra detected) with one exception. Low levels (7 cfu/m3) remained in Room 9182. I do not have electronically transmitted lab sheets. If you provide me a fax number, I will send them to you.

There have been some additional leaks on the 9th floor. CE Smith, GSA, and DOD are all working together to get the issue resolved as quickly as possible.

From: "Joe Balinas" <jcapablanca@usa.net> AT internet on 03/30/2000 09:06 PM

From: "Joe Balinas" <jcapablanca@usa.net> AT internet on 03/30/2000 09:06 PM

To: Patricia L. Gretskey/WPY/RW/GSA/GOV
cc: Michael.Leaken@NA.AMEDD.ARMY.MIL AT internet@ccMTA-GEMS-MTA-01,
Joe.Balinas@NA.AMEDD.ARMY.MIL AT internet@ccMTA-GEMS-MTA-01

Subject: Follow Up IAQ Studies

Hello Trish,

Do you have the most recent update/follow-up IAQ/Stach studies? One of the 9th floor staff member recently relocated mentioned a persistent "high level" of Stach. readings still in the 9th floor. Also mentioned was the persistent flooding and leakage from the roof.

Appreciate any update you have for us. VR//Joe.

Get free email and a permanent address at <http://www.netaddress.com/?N=1>

VIA HAND DELIVERY, MAIL AND FAX

March 28, 2000

**Thirteenth Skyline Associates Limited Partnership
C/o Charles E. Smith
2345 Crystal Drive
Arlington, Virginia 22202**

**Attn: Mr. Ralph P. Silverman
Senior Vice President & Counsel**

**Re: Five Skyline Place Building
5111 Leesburg Pike
Falls Church, VA. 22202
GS-11B-80523**

Dear Mr. Silverman:

This letter is an addendum to our letter of March 28, 2000 which serves as a Show Cause Notice in reference to the deficiencies previously cited at the property leased from Thirteenth Skyline Assoc., L.P. by the General Services Administration under the above referenced lease. This transmits the raw data from microbial sampling done at GSA expense on March 12, 2000 which shows two areas in that leased location still testing positive for stachybotrys and aspergillus niger.

These areas must be immediately cleaned per the appropriate protocols and re-tested at your expense to show you have achieved the previously agreed to zero tolerance levels per the New York City Department of Health "Guidelines on Assessment and Remediation of Stachybotrys Atr in Indoor Environments". Patricia Gretskey from our Safety and Environmental Health is available to discuss these details with your Indoor Air Quality contractor. She may be reached on 202-708-5236.

These two specific areas, as well as the area under the raised floor in Room 105 of Skyline IV, and the newly discovered water intrusion area in a stairwell in Skyline V, are part of the overall remediation including cleaning and microbial testing required per our letter of March 28 and should be specifically addressed in your response to the Show Cause Notice.

If you have any questions regarding this matter, please call me on my direct line on (202) 708-9736 or on my cell phone (703) 447-1278.

Sincerely,

T.C. Hairston
Contracting Officer (WPD)
NOVA Service Delivery Team



**General Services Administration
National Capital Region
Washington, DC 20407**

March 23, 2000

Mr. Craig Gerardi
C/o Charles E. Smith Commercial Realty
5201 Leesburg Pike, Suite 101
Falls Church, Virginia 22041

Re.: Cure letter for roof leak test under Lease # GS-11B-30064

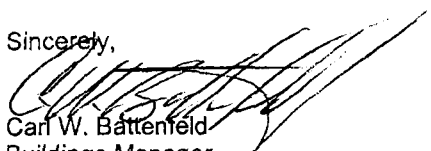
Dear Mr. Gerardi:

This letter is in reference to the deficiencies cited at the property leased from you by the General Services Administration at Skyline 5 Office Building, Suite 900, located at 5111 Leesburg Pike, Falls Church, Va.

The covenant to pay rent and the covenant to provide and service, utility, maintenance, or repair required under this lease is dependent. This concerns the new roof that is being installed on Skyline 5. GSA is requesting in writing test results for the integrity of the new roof (water tight) upon completion of the roof.

This will become part of our lease enforcement files and serve as a basis for evaluating your adherence to the responsibilities outlined in the terms of your lease. Should your company not comply with this request, more stringent measures will be implemented to ensure compliance.

Sincerely,


Carl W. Battenfeld
Buildings Manager
Skyline/NOVA, Property Management Center

Charles E. Smith Commercial Realty

5201 Leesburg Pike, Suite 101
Falls Church, VA 22041
Tel (703)284-7660 Fax(703)820-3978

March 27, 2000

Mr. Carl W. Battenfeld
Buildings Manager
General Services Administration
5203 Leesburg Pike, Ste. 1407
Falls Church, VA 22041

Re: Revised
Cure Letter for Roof Leak Test Under Lease #GS-11B-30064

Dear Mr. Battenfeld:

This letter serves as a response to your above-referenced letter dated March 23, 2000 requesting written test results for water testing of replacement roof areas in Skyline Five.

At the end of the replacement project, we will have replaced both the north and south roof sections along with the cooling tower roof area. By the week ending, March 31, 2000 we will provide you with written watertight test results for the cooling tower roof area.

We have completed the south roof area and are currently working towards completion of the south roof. We anticipate four more working days to complete all of the final waterproofing installation for the south roof. Afterwards we will perform water tightness test on the north and south roof areas and provide you with written results.

The full completion of the north roof is anticipated within three weeks, which includes the installation of the insulation and final rock ballast placement. We will again perform water tightness test on the north and south roof areas at this time and provide you with written results.

I appreciate your cooperation with this matter. If you have any questions or comments, please feel free to contact me.

Sincerely,

Charles E. Smith Real Estate Services



Craig A. Gerardi
Property Manager

C: Denny Whirworth
Bonnie Muth

Skyline Five – 9th Floor-Status

DISA #900

As of 3/28/00-Prepared by CES

Environmental Remediation Cleanup

Skyline IV – Suite 105

Area was cleaned under containment conditions starting on Friday, March 24, 2000. Occupants furniture was relocated started Friday at 5:00 p.m., subsequently surfaces were wiped down and drywall areas removed from space. Continuing on Saturday and Sunday, wall areas were rebuild, final paint coat applied, and furniture returned to area. Occupants able to resume operations Monday morning, March 27, 2000.

Skyline IV – Return Air Fan Camber

Based upon the testing of Applied Environmental, the return air fan cambers and associated fan motor were cleaned and wiped down on Saturday, March 25, 2000.

Water Infiltration Issues

Rooms 9095, 9094

Water infiltration was discovered Monday morning, March 27, 2000, by inspection team (CES, DOD, and GSA representatives). Water was infiltrating from the upper interior window bulkhead. Roofing contractor and structural specialist were notified of problems. All were on-site by approximately 10:00 a.m. Suspected failure of metal flashing at roof deck and exterior wall joint. Area resealed and final layers of membrane applied, completed by COB same day.

As an additional measure, caulking contractor checked exterior joints around problem area. Inspection concludes failure at roof surface.

CES cleaning contractor and maintenance staff started formal cleanup procedures by 8:30a.m. Cleanup completed by noon same day. Water damage carpeting removed after hours same day.

Planned construction work includes replacement of carpeting and wall areas. Estimated completion by COB Friday, March 31. Delay in reconstruction due to availability of carpeting.

Rooms 9207

Small leak onto ceiling tile at expansion joint under south roof (George Mason Dr.). Area noted on space inspection Monday morning, March 27, 2000. Roofing contractor

completed repairs on south roof at expansion joint between Skyline Four and Five on Monday afternoon the same day.

Stairwell #4

Noted on morning team inspection, Monday, March 27, 2000, water infiltrated roof top mounted smoke control fan hood located on north roof (front of building). Afternoon of same day, roof membrane around penetration was rechecked and as temporary repair metal fan hood was recaulked. New metal fan hood to be fabricated and installed.

Remaining Construction Installation within Suite 900

Room 9173

All construction items have been completed in office except carpeting due to long order lead-time. Carpet material has been received and installation is pending scheduling with DISA agency. Replacement of window valance pending delivery of unit.

Room 9181 (Conference Room)

All construction items have been completed except carpeting and replacement of window unit, all due to long order lead-time for materials. Window replacement planned for Wednesday, March 29, 2000. Carpet material has been received, installation pending latest IAQ test results.

New conference chairs on order, full delivery expected within one week. Selection of chairs received from agency Monday, March 27, 2000.

Room 9182

New office chairs on order, delivery expected within one week. Selection of chairs received from agency Monday, March 27, 2000.

Room 9199

Removal of wall covering and replacement of window valance, pending relocation of occupant to original office room 9173.

Roof Replacement Status**Skyline Five**

Current roof installation is continuing on the north roof (front of building). Final second layer of waterproofing material has been installed. Expansion joint areas between Skyline Five and Four have been made watertight. Full completion (installation of insulation, filter material, and rock ballast) on north roof is expected within two weeks, pending weather conditions.

Skyline Four and Six- Roof Replacement

CES to replace roofs on Skyline Four and Six. Currently not experiencing any roofing failures at these properties, however, proactively planning replacement for this year. Contracts for the roofing replacements have been awarded this week and a construction work schedule will be forwarded to GSA and DOD representatives.

FAXGSA
SKYLINE CUSTOMER SERVICE CENTER

Date

March 29, 2000

Number of pages including cover sheet

7

To:

Trish Gutsky

From:

CARL W. BATTENFELDBUILDINGS MANAGER

Phone

6618

Fax Phone

202 708 5254

CC:

Phone

703 756-6270

Fax Phone

703 756-6289

REMARKS:

☐ Urgent☐ For your review☐ Reply ASAP☐ Please comment

response from CES on
care taken + up date
from CES

employee representatives in the affected areas. Such an inspection should be conducted according to the following protocol:

Visual Inspection

Visual inspection is the most important initial step in identifying a possible contamination problem. Visual identification of black mold in chronically-wet areas is considered to be a possible indicator of *Stachybotrys atra*. Ceiling tiles, gypsum wall board, cardboard, paper, and other cellulosic surfaces should be given careful attention during visual inspection. The extent of any water damage and mold growth should be evaluated as this will be important in determining remedial strategies. Ventilation systems should also be visually checked, particularly for damp filters.

Bulk Sampling

a. If only a limited area is affected (i.e. all or part of an area that is approximately 30 square feet or less), the water damage is the result of a known occurrence, and no occupants are experiencing symptoms, then bulk (or other sampling) is not required. Remediation (as described under Remediation, Section A) should proceed without further evaluation, under the assumption that *Stachybotrys atra* or (other fungal contaminants) are present.

b. Bulk samples should only be used to document the presence and extent of *Stachybotrys atra* if extensive areas are affected, for example if visible mold occurs on areas larger than one wall board panel and water damage is a chronic problem, or if occupants are experiencing symptoms which may be related to *Stachybotrys atra* exposure.

c. When bulk sampling is required, designated personnel should collect bulk samples from appropriate areas (e.g. damp, moldy, cellulose-derived material) by scraping surface materials into a clean Ziploc plastic bag or by stripping the suspect surface with vinyl acetate tape.

Air Monitoring

a. Air sampling for *Stachybotrys atra* should not be part of a routine assessment. This is because air sampling methods for *Stachybotrys atra* are prone to false negative results and therefore cannot be used to rule out contamination. In addition, when the size of the affected area is small or moderate, decisions about appropriate remediation strategies can be made on the basis of visual inspection and bulk sampling.

b. Air monitoring may be required if there is evidence from visual inspection or bulk sampling that ventilation systems may be contaminated. The purpose of such air monitoring is to assess the extent of contamination throughout a building.

c. If air monitoring is conducted, personnel conducting the sampling must be trained in proper air sampling methods for microbial contaminants.

Evaluation of Environmental Data

Analysis

a. Documented quality control in the laboratories used for analysis of the bulk and air samples is necessary. *Stachybotrys atra* is easily missed if other species are present and microscopic identification of the spores requires considerable expertise. These services are not routinely available from commercial laboratories. The laboratory director should be familiar with the literature concerning *Stachybotrys atra*. A list of approved laboratories is available from the New York State Department of Health (915) 474-7411.

b. Samples should also be analyzed for the presence of other common indoor microbial contaminants.

c. Both indoor and outdoor air samples from nearby area, without signs of contamination should be collected and compared.

Evaluation criteria

a. Bulk sampling: Sampling results in excess of 1 colony forming unit per gram should be considered positive. Surfaces that were sampled and found to be contaminated with *Stachybotrys atra* need to be remediated, as described in Section III.

b. Air monitoring:

- (1) Concentrations of mold in indoor air which exceed concentrations in outdoor air should be considered positive. Remediation of surfaces and general cleaning is required, as described in Section III.
- (2) Airborne concentrations of 10^3 - 10^4 cfu/m³ or greater require immediate evacuation of all occupants.

$10^3 - 10^4 \text{ cfu/m}^3$

REMEDIATION

Different levels of containment are necessary depending on the extent of the contamination problem. In all situations, the underlying cause of water accumulation must be rectified or the problem will recur. There must be a mechanism in place for ensuring an immediate response to these problems. Cleanup should be conducted when the affected area is unoccupied. In all remediations, a routine follow-up inspection at 6-12 months or sooner if visible mold contamination or water damage recurs should be conducted. Emphasis should be on ensuring proper repair of the building infrastructure, so that water damage and moisture buildup do not recur.

Four different levels of abatement, as described below, are identified, based on the extent of *Stachybotrys atra* contamination.

Level I: Small Isolated Areas (2 sq. ft. or less)

(1) Example: ceiling tiles

(2) Cleanup can be conducted by regular building maintenance staff. Such persons must receive training from a qualified individual on proper cleanup methods, protection, and potential health hazards, and should

be free from asthma, allergy and immune suppressive disorders. Gloves and a half face respirator should be worn. A full respiratory protection program, in accordance with 29 CFR 1910.134 is required.

- (3) Contaminated absorbent material should be removed in a sealed plastic bag.
- (4) Surrounding areas should be cleaned with household bleach.
- (5) Special containment or evacuation measures are not necessary.

Level II: Larger Isolated Areas (2 - approximately 30 sq. ft.)

- (1) Example: individual drywall panels.
- (2) Cleanup can be conducted by regular building maintenance staff. Such persons must receive training from a qualified individual on proper cleanup methods, protection, and potential health hazards, and should be free from asthma, allergy and immune suppressive disorders. Gloves and a half face respirator should be worn. A full respiratory protection program, in accordance with 29 CFR 1910.134 is required.
- (3) Surrounding material should be covered with plastic sheets and tape before removal.
- (4) Contaminated absorbent material should be removed in a sealed plastic bag.
- (5) Surrounding areas should be cleaned with household bleach.

Level III: Large Scale Remediations¹ (more than 30 square feet)

- (1) Example: More than one wallboard panel in an area which cannot be isolated from personnel.
- (2) Personnel trained in the handling of hazardous materials is necessary.
- (3) Containment of the affected area is required.
 - a. Complete isolation of work area from occupied spaces using plastic sheeting sealed with duct tape (including openings, fixtures and HVAC components) is required.
 - b. A high efficiency particulate air (HEPA) exhausted negative air unit is required.
 - c. Airlocks and decontamination room are needed for exit from work area.
- (4) Contaminated material should be removed in double-sealed plastic bags.
- (5) The work area must be HEPA vacuumed prior to the removal of isolation barriers.
- (6) Cleanup workers should wear:
 - a. Full-face respirators with HEPA cartridges or powered air purifying respirators.
 - b. Disposable protective clothing, head gear, foot covering, gloves.

(7) Air monitoring;

- a. should be conducted during remediation to determine if spores are escaping during remediation and prior to removal of isolation barriers to assess the efficacy of the remediation.
- b. should be conducted after large scale remediation, to determine its effectiveness and whether an area is safe for symptomatic persons to reoccupy. If post-remediation air samples indicate the presence of *Stachybotrys*, even in minor amounts, further investigation of possible sources is required.

Level IV: Remediation of HVAC Systems

- (1) Personnel trained in the handling of hazardous materials are required for remediation of HVAC systems.
- (2) Containment of the affected area is required.
 - a. Complete isolation of work area from occupied spaces using plastic sheeting sealed with duct tape (including openings, fixtures and HVAC components) is required.
 - b. A high efficiency particulate air (HEPA) exhausted negative air unit is required.
 - c. Airlocks and decontamination room are needed for exit from work area.
- (3) Contaminated material should be removed in double-sealed plastic bags.
- (4) The work area must be HEPA vacuumed prior to the removal of isolation barriers.
- (5) Cleanup workers should wear:
 - a. full-face respirators with HEPA cartridges or powered air purifying respirators.
 - b. disposable protective clothing, head gear, foot covering, gloves.
- (6) If *Stachybotrys atra* is present in settled dust removal with a HEPA equipped vacuum and subsequent damp wiping is recommended.
- (7) Air monitoring;
 - a. should be conducted during remediation to determine if spores are escaping during remediation and prior to removal of isolation barriers to assess efficacy of the remediation.
 - b. should be conducted after large scale remediation, to determine its effectiveness and whether an area is safe for symptomatic persons to reoccupy. If post-remediation air samples indicate the presence of *Stachybotrys atra*, even in minor amounts, further investigation of possible sources is required.
- (8) Growth supporting material should be removed from ducts with a HEPA vacuum, where practical, if not removal of the affected component of the HVAC system is required.
- (9) Contaminated material should be disinfected prior to removal. Decision concerning the type of disinfection should be made by a qualified

individual, based on the extent of the growth supporting material. Decisions as to disinfection must be based on the extent of the growth substrate in the ducts. There are numerous "biocides" such as quaternary ammonium compounds (e.g. dimethylbenzyl ammonium chloride) that are employed routinely for disinfection and cleaning surfaces, particularly in hospitals and laboratories. Some of these biocides are recommended by manufacturers for use with cooling coils and condensation pans. In fact, the biocides are essential for maintaining the system. Household bleach is often recommended and can be used to clean coils. Chlorine dioxide or ozone are used for disinfecting inside of ducts.

Potentially toxic substances such as chlorine dioxide or ozone that are currently used for disinfecting duct work should not be used when the building is inhabited. Also, sufficient time should be allowed for the disinfectant to dissipate. These substances, however do have a short half life. As to whether they would be efficacious or not would depend upon the extent of the contamination and circumstances of application. As a safety factor it may be advisable to disinfect molded material within a duct system prior to cleaning.

- (10) The causes of *Stachybotrys atra* accumulation and/or growth must be identified and corrective action taken.

Hazard Communication

When *Stachybotrys atra* is found, occupants in the affected area(s) should be notified of its presence by the building owner and the employer. Notification should include the description of the remedial measures to be taken and a timetable for completion. Group meetings held before and after remediation with full disclosure of plans and results can be an effective communication mechanism. Some individuals may require separate counseling. They should be encouraged to seek medical advice from a qualified occupational/environmental health practitioner if they are concerned about continuing health problems. Individuals seeking medical attention should be provided with a copy of all inspection results and interpretation to give to their medical practitioners.

CONCLUSION

In summary, prompt removal of contaminated material and infrastructural repair must be the primary response to *Stachybotrys atra* contamination in buildings. Emphasis should be placed on preventing contamination through proper building maintenance and prompt repair of water damaged areas.

Chronic exposure to airborne *Stachybotrys atra* poses a risk of debilitating health effects caused by irritative and allergic reactions. This risk is compounded by exposure to additional molds and other pollutants usually found in buildings contaminated by *Stachybotrys atra*. Laboratory tests for immune

markers associated with *Stachybotrys atra* exposure are not helpful at this time. Research should be pursued to refine such tests and characterize them more fully.

The simplest and most expedient remediation that properly and safely removes *Stachybotrys atra* from buildings should be used. This includes prompt removal, cleaning of contaminated sites and repair of the defects that led to water accumulation. Widespread contamination poses much larger problems that must be addressed on a case-by-case basis in accordance with published guidelines for remediation. Effective communication with building occupants is an essential component of all remedial efforts. Individuals with persistent health problems should be referred to physicians competent in evaluating health effects of microbial exposures.

REFERENCES

1. Mowey PR. Microbial contamination in buildings: precautions during remediation activities. 1992.



**General Services Administration
National Capital Region
Washington, DC 20407**

SKY 5, 9TH FLOOR

- 03/27/00.....Meet at CES office at Skyline 4:30pm. Present were: Dennis Whitworth, Craig Gerardi and Terry (structural engineer) from CES, John, (roofing contractor foreman) for CES, Ed Fruit, Tina America from DOD and Carl Battenfeld from GSA. At 4:45pm we went over to Sky 5, 9th floor. Helen Creel DISA showed us a small trickle was coming in at the corner of the window frame in rooms 9094 and 9095. At this time CES could not pin-point where this was coming from since the insulation on the inside of the outside wall leading down to the window was still damp from the weekend rain. The roof looked water tight. All water proofing is installed up to the cap of the wall. All expansion joints on the roof were covered. All damp carpet was cut out of rooms 9094 and 9095 so the musty odor would dissipate. The stairwell had water penetration from the exhaust fan too. The metal cap which the fan is mounted on is deteriorated. This was caulked for a quick fix and a new cap will be installed. The damage in the stairwell between the 9th and 7th floors will be repaired. Room 9157 has a drain pipe leaking plumbers will be out 03/28/00 to fix this.
- 03/28/00.....Walked space with Dennis Whitworth and Craig Gerardi from CES, Tina America from DOD and Carl Battenfeld from GSA. All spaces are dry. Roofers are working on the roof. GSA and DOD are concerned about the caulking outside the windows on 9094 and 9095. Mr. Gerardi will have the caulkers remove the old caulking and install new caulking. (rather be safe than sorry)



● Patricia L. Gretskey

03/27/2000 02:49 PM

To: douglas benton, Battenfeld Carl, Michael J. Castle/WPD/RW/GSA/GOV
cc:

Subject: Sample results- Skyline V

I have received laboratory sheets for sampling performed 3/12/00 (cleaning took place 3/10-11). With two exceptions, all rooms sampled were considered clean with no *Stachybotrys* detected. In Room 9182 (adjacent to the conference room), Applied's results indicate 7 cfu/m3 of *Stachybotrys atra*. In Room 9143, Applied's results indicate 7 cfu/m3 of *Aspergillus niger*. To date, this room has not shown any presence of *Stachybotrys* but had a prior *A. niger* concentration of 7 cfu/m3 and was included during the weekend clean-up.

I just spoke to Jon Shatz. He stated AHU #2 and the Skyline IV areas were cleaned this past weekend. Applied was also on-site last friday (3/24) to sample room 9095- the site of recent leaks.

Date: December 21, 1999

Meeting: Reference Skyline 5, Ninth Floor

Name	Office	Telephone	Fax
DAVID C POLK	GSA/SKYLINE CSC	703-756-6270	756-6289
BRIAN S. JONES	DISA SAFETY MGR	703-607-6460	607-4547
BOB CLAPP	DISA BLDG. MGR.	703-681-2570	607-4547
TRACY TERWILLIGER	DISA ^{SKY5} D20 9th Floor	681-0286	681-0341
Jeanette Boyd	DISA D43 (Hqs)	607-4419	607-4547
MARYANN Ramos PA-C MPH	Civilian Employee Health Sec - Pentagon	703 697-0850	697-8652
JOE BALINAS	CIV. EMP. HEALTH PENTAGON	(703) 697-0850	697-8652
TRISH GRETSKY	GSA - SEEM	(02) 708-5254	708-6618
MICHAEL J. CASHE	GSA ^{Program Director} NOVA SDT	(703) 235-2168	(703) 235-3723
JOHN BRADY	OSD/WHS. SAFETY	703-693-3608	
PETER Gillson	" " "	" " "	
Linda PROCTOR	DOD/WHS/FCA	703-681-7711	703-681-7707
Curtis THOMAS	GSA/SKYLINE	703-756-6270	703-756-6289
HELEN CREEK	DISA(D2) SKYLINE	703-681-0244	703-681-0341
RUSS CHESTER	DISA(D2) SKY5, 9th Fl	703-681-0249	703-681-0341
Craig Gerardi	CES	703/284-7661	703/284-3978
Sam Ryan	DOD leased facilities	703 681-7711	681-7780

GSA Bldg
manager

Don't the
empties

CE Smith
POC

POC
for DOD



**General Services Administration
National Capital Region
Washington, DC 20407**

SKY 5, 9TH FLOOR

03/23/00.....7:00am – GSA, DOD and CES surveyed the 9th floor. All window are still dry (its not raining). The caulking contractor is on site (7:45am) and will begin sealing the joint between the window and the outside wall. Room 9095 (the major leak) and room 9207 (expansion joint leak) are fully operational. Sky 5 roof will be totally water tight 03/26/00 per CES roofing contractor with a new roof on the building. Ms Muth will be calling me back today with information on Sky 4, 105. If they are going to work in there this weekend replacing walls. Told Ms. Muth CES that GSA wants a leak test when the roof of Sky 5 is totally complete.

*****CES is planning to work this weekend 03/24/00 through 03/26/00 at Sky 4, room 105 replacing drywall. The space will be operational on being of business day 03/27/00



**General Services Administration
National Capital Region
Washington, DC 20407**

March 23, 2000

Mr. Craig Gerardi
C/o Charles E. Smith Commercial Realty
5201 Leesburg Pike, Suite 101
Falls Church, Virginia 22041

Re.: Cure letter for roof leak test under Lease # GS-11B-30064

Dear Mr. Gerardi:

This letter is in reference to the deficiencies cited at the property leased from you by the General Services Administration at Skyline 5 Office Building, Suite 900, located at 5111 Leesburg Pike, Falls Church, Va.

The covenant to pay rent and the covenant to provide and service, utility, maintenance, or repair required under this lease is dependent. This concerns the new roof that is being installed on Skyline 5. GSA is requesting in writing test results for the integrity of the new roof (water tight) upon completion of the roof.

This will become part of our lease enforcement files and serve as a basis for evaluating your adherence to the responsibilities outlined in the terms of your lease. Should your company not comply with this request, more stringent measures will be implemented to ensure compliance.

Sincerely,

Carl W. Battenfeld
Buildings Manager
Skyline/NOVA, Property Management Center



**General Services Administration
National Capital Region
Washington, DC 20407**

SKY 5, 9TH FLOOR

03/21/00.....12:25pm, received a call from Helen Creel. Water is leaking from top of Windowsills. This is coming from down the side of the building and through the caulking between the window and the concrete wall of the outside of the building. These rooms are 9135, 9136B, 9137, 9139, 9141, 9145, and 9152. CES will have a caulking contractor at Skyline Wed. morning to seal the windows.

9207 has a roof leak from the expansion joint. The roofing contractor will be on site to seal the leak today within a 2hr. time frame from the call.

Went over first with CES Building Director to look at the problem. Came directly back to CES offices when contractors were called and Engineers were sent to take care of the leaks. Dennis Whitworth and Craig Gerardi and crew when over to look at the problem. CES was very responsive in the way this was handled. Will be over At Sky 5 in the morning at 6:50am to scope out the 9th floor.



General Services Administration
National Capital Region
Washington, DC 20407

SKY 5, 9TH FLOOR

1/22/11 Walk through with CES, DOD and GSA Sky 5, 9th floor. Room 9167 walls were not skimmed/prepared before painting, cove base and carpets need cleaning. Room 9191 new paint peeling off the window frame. Room 9198 ceiling tile needs replacing and corner moulding put back. Room 9188 wall needs paint touch-up, looks like they did a rush job. Room 9187A painting is good but the furniture was banged up against the wall when put back in place leaving one small hole and a black mark on the newly painted wall. Room 9182 the side wall does not look like it was painted/or marks on the wall faded through new paint and new paint coming up from the window frame. Room 9181 new paint peeling from window frame. Room 9114 room all painted, looks good. Room 9119 both side walls need touch-up painting and ceiling tile needs to be replaced. CES is addressing the painting and the peeling of the new finish on the window frames. ** *An inspection was done of all DISA space in Skyline except for Sky 3 which will be done at a later date. CES wanted to see if there are any concerns in these areas. GSA, DOD, DISA Real Estate & Facilities & CES.*

1/24/11 GSA, CES & DISA/DOD checked the refinishing of the window frames. What has been completed looks excellent.
The carpet will arrive today for the offices that require replacement. It will not be installed until all the painting is complete.
The conference room drapes are going out today to be cleaned.
CES will working this Sat. on the 9th floor, construction etc.

From: "Womack Kent WHS/REF" <KWomack@osd.pentagon.mil> AT internet on 03/13/2000 02:52 PM
To: Douglas G. Benton/WPD/RW/GSA/GOV, "Higgins Brian P J WHS/REF" <BHiggins@osd.pentagon.mil>
AT internet@ccMTA-GEMS-MTA-01, "leakan mike Clinic" <Michael.Leakan@NA.AMEDD.ARMY.MIL> AT
internet@ccMTA-GEMS-MTA-01, Patricia L. Gretskey/WPY/RW/GSA/GOV, "Gillson Pete WHS/REF"
<pgillson@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01
cc: "Gillson Pete WHS/REF" <pgillson@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01
Subject: FW: Skyline V, 9th floor update

All, FYI

-----Original Message-----

From: Ryan, Sam, , WHS/REF
Sent: Monday, March 13, 2000 2:25 PM
To: Womack, Kent, , WHS/REF
Cc: Fruit, Ed, , WHS/REF
Subject: FW: Skyline V, 9th floor update

Kent, as you can see from Tina's report there was some activity over the weekend. She also provided a current status on the affected rooms. Sam

-----Original Message-----

From: America, Tina, , WHS/REF
Sent: Monday, March 13, 2000 11:12 AM
To: Ina Sheperd (E-mail); Scott Stern (E-mail); Helen Creel (E-mail);
Robert Clapp (E-mail); Tracy Terwilliger (E-mail); Russ Chester (E-mail);
Jeanette Boyd (E-mail)
Cc: Bonnie Muth (E-mail); Craig Gerardi (E-mail); Carl/GSA' 'Battenfeld
(E-mail); Mike Castle (E-mail); Ryan, Sam, , WHS/REF; Proctor, Linda, ,
WHS/REF
Subject: Skyline V, 9th floor update

Skyline V/IV Update:

I visited the site on Saturday, late afternoon. All rooms had been sealed and cleaned with the exception of Skyline IV, room 105. In Skyline IV, room 105, the Environmental Group had intended to use a biocide fog underneath the raised floor but while exploring they noticed mold growth along the exterior wall. It was decided the fog would not be adequate and further investigating was necessary to determine how to tackle the clean up/removal (i.e. removal of raised floor, etc.). The negative airflow was left on through out the night. The group returned on Sunday, turned off the negative airflow and waited six hours in order for the air in the rooms to settle before taking samples. DOD & GSA will meet with CES to determine the method of clean up in Skyline IV, room 105 and advise DISA as soon as possible. The following is an updated list of what has been done in each room in Skyline V and what still remains to be done:

Room 9181 (Conference Room):

Done

Needs to be

- Installed new blinds

Room 9113:

Done

Needs to be done

- Contaminated drywall removed
- Missing
- cove base
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- Installed new blinds

Room 9173 (9112):

Done

Needs to be

done

- Contaminated drywall removed
- New carpet
- All surfaces cleaned w/bleach solution
- Clean exterior window
- Drywall patched and painted
-
- Install new valance
- Window frames painted (twice)
- New ceiling tiles
- Removed valance
- Installed new blinds
- Built-in cabinets removed
- New cabinets installed
- Removed vinyl wall covering (not to be re-installed)

Room 9191:

Done

- Cleaned window frame
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Installed new blinds
- Cleaned window frame

Room 9199: (Not to be done until Mr. Miller moves back to room 9173)

Needs to be

done

- Remove vinyl wall covering
- Drywall patch and paint
- Remove drapes
- Install new valance

Rooms 9201, 9201A, 9112 (the real 9112), 9110, 9180, 9180A, 9143:

Done	Needs to be
done	
- All surfaces cleaned w/bleach solution	-
9201A replace ceiling tile	
- Additional samples taken 3-12-00	- 9201A
patch & paint drywall	
- 9201A missing cove base	-

9143 tape residue/door frame

Room 9121 (copier room):

Done

- Replaced stained ceiling tile
- Samples taken on 3-12-00

Room 9131:

Done

- Window frame cleaned

If you have any questions or input please call (703) 681-7711.

Thank you,

Tina America
DOD Building Manager
Falls Church Area Office

From: "Womack Kent WHS/REF" <KWomack@osd.pentagon.mil> AT internet on 03/06/2000 06:59 AM
To: Douglas G. Benton/WRP/RW/GSA/GOV, "Higgins Brian P J WHS/REF" <BHiggins@osd.pentagon.mil>
AT internet@ccMTA-GEMS-MTA-01, "leakan mike Clinic" <Michael.Leakan@NA.AMEDD.ARMY.MIL> AT
internet@ccMTA-GEMS-MTA-01
cc: "Gillson Pete WHS/REF" <pgillson@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, Patricia L.
Gretsky/WPY/RW/GSA/GOV, Robert D. Armstrong/WRP/RW/GSA/GOV, Michael J.
Castle/WRP/RW/GSA/GOV, "Fruit Ed" <EFruit@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01,
"Ratcliffe Mary" <MRatcliffe@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Proctor Linda"
<LProctor@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ryan Sam"
<SRyan@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01

Subject: FW: FW: Skyline V - Stachybotrys on 48 Hours TV

All,

Just received a call from Sam Ryan that Ina Shepherd's boss, Mr. Thoma, called her on his cell phone on his way in to work from Manassas this morning to say he wants an on-site meeting with GSA, WHS, and Dr. Leakan tomorrow, Tuesday, March 7, 2000 at 10:00 AM or 11:00 AM. I can be available, can you? If you can't make either of those times, when could you? Apparently Mr. Thoma has thought about this over the weekend and feels he has to get a current status. Thanks

-----Original Message-----

From: doug.benton@gsa.gov [mailto:doug.benton@gsa.gov]
Sent: Friday, March 03, 2000 3:04 PM
To: Womack Kent WHS/REF
Subject: Re: FW: Skyline V - Stachybotrys on 48 Hours TV

My experience is this would be a good time for us to offer an all hands meeting with Dr. Leakan and the other IAQ specialists to explain in detail what we are dealing with at Skyline V. We have low levels of contamination and hope to get to no contamination very soon. If DISA would like a presentation or Q&A session GSA will be there with all appropriate personnel. Thanks

DOUGLAS G. BENTON

03/17/2000 12:13 PM

Sent by: Douglas G. Benton

To: Robert W. Goodman/WP/RW/GSA/GOV@GSA, Nancy E. Czapek/WP/RW/GSA/GOV@GSA
cc: Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA, Robert D. Armstrong/WPD/RW/GSA/GOV@GSA, Michael J. Castle/WPD/RW/GSA/GOV@GSA

Subject: Heads up - Skyline V

We continue to have serious problems at Skyline V occupied by DISA.

This is the location we have been working on since December that had Stachybotrys contamination. The clean up had been going well, but in late February we still had seven locations on the top (9th) floor that had very low levels of Stachybotrys, continuing clean up and replacement of carpet and conference room chairs was ongoing at CE Smith expense. We had tested the entire rest of the building with negative results. The 9th floor was the original problem area. We have a good communications chain with DISA and WHS and had been having satisfactory progress.

Earlier this week, DOD found additional Stachybotrys under a raised computer floor in Skyline IV as they continued to look for it in their Skyline locations. An emergency abatement plan is underway and Trish Gretskey is in on all this with us.

This morning there was another major roof leak in an area previously unaffected on the 9th floor of Skyline V. CE Smith is continuing to do roof replacement - which was the ultimate solution for the first area with problems - and had a serious leak overnight where the old and new roof meet. Bob Armstrong really raised heck with Smith as their initial response was one guy, now there are several and the clean up continues. Smith does not argue about paying for things, but the continued problems are really wearing DISA out.

There has been no press coverage yet, but.

I will keep you informed.

DOUGLAS G. BENTON

03/01/2000 03:43 PM

Sent by: Douglas G. Benton

To: Robert D. Armstrong/WPD/RW/GSA/GOV@GSA, Michael J. Castle/WPD/RW/GSA/GOV@GSA
cc: Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA

Subject: FW: Skyline V Stachybotrys Action Plan 2-29-00

Bob, Mike - based on this lets get after Smith on the quality of the work as noted below.

----- Forwarded by Douglas G. Benton/WPE/RW/GSA/GOV on 03/01/2000 03:40 PM -----

From: "Womack Kent WHS/REF" <KWomack@osd.pentagon.mil> AT internet on 03/01/2000 03:25 PM
To: Douglas G. Benton/WPD/RW/GSA/GOV
cc: Robert D. Armstrong/WPD/RW/GSA/GOV, Michael J. Castle/WPD/RW/GSA/GOV, "Fruit Ed WHS/REF" <EFruit@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Gillson Pete WHS/REF" <pgillson@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Higgins Brian P J WHS/REF" <BHiggins@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Proctor Linda" <LProctor@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ryan Sam" <SRyan@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01

Subject: FW: Skyline V Stachybotrys Action Plan 2-29-00

Doug,

This morning, just after I got your e-mail with the progress inspection report attached, I got an e-mail from Sam Ryan and a copy of the e-mail below from Ina Shepherd. As you can see from her #3, Ina is not that happy with the quality of work being done. Sam Ryan is in agreement and indicates Smith is now talking about cleaning carpet that was reportedly being replaced.

Pete Gillson of our Safety Office advises that he just called Trish Gretskey about the test reports and was advised that GSA is consulting a recognized expert to interpret the reports in preparation for the meeting. I called her and she said she is preparing a summary of the test results while they wait for the contractor's final report and will forward it through you. She also said she was willing to talk with the DISA people if they had questions. So that is what we will tell them. We will not provide them the test results until authorized to do so by your office. But pressure is building so the interpretation of the testing needs to be expedited as much as possible. It appears that the extra round of clean up that was just initiated has aroused some concern by the agency that they might be in danger.

-----Original Message-----

From: Shepherd, Ina [mailto:ShepherdI@ncr.disa.mil]
Sent: Wednesday, March 01, 2000 10:04 AM
To: 'Ryan, Sam, , WHS/REF'; Shepherd, Ina
Cc: Proctor, Linda, , WHS/REF; America, Tina, , WHS/REF; Creel, Helen; Thoma, Thomas; Sydnor, Bruce; Stern, Scott; Weaker, Norman; Boyd, Jeanette;

Engelhardt, Sue; 'kwomack@osd.pentagon.mil'; 'efruit@osd.pentagon.mil';
'rtownsend@osd.pentagon.mil'
Subject: RE: Skyline V Stachybotrys Action Plan 2-29-00

Sam,
I recommend the following action:

1. Provide Ms. Creel and this office with copies of any and all IAQ reports available that have not been provided to date.
2. That you set up a tentative meeting for the week of 20 March 2000, this will give the contractor the incentive to complete work before a specific date.
3. Continue to keep us advised of the status of ongoing efforts

I would like to add, at a recent space walk with Ms. America of your staff and Bonnie Muth, C.E. Smith, and Carl Battenfeld, GSA and DISA employees that the quality of work performed to date is not quality work. There were many areas that had paint on the carpet, painting of the walls was poorly done (surfaces were not prepared properly), the painting of the window sills did not take, the painting of areas was not consistent, along with a number of other items, which I believe have been provided to your office by Ms. Creel's staff.

Thank you in advance for keeping the communication flowing.

v/r
Ina

-----Original Message-----

From: Ryan, Sam, , WHS/REF [mailto:SRyan@osd.pentagon.mil]
Sent: Wednesday, March 01, 2000 7:25 AM
To: 'ShepherdI@ncr.disa.mil'
Cc: Proctor, Linda, , WHS/REF; America, Tina, , WHS/REF
Subject: FW: Skyline V Stachybotrys Action Plan 2-29-00
Importance: High

Ina, for your information. Sam

-----Original Message-----

From: Womack, Kent, , WHS/REF
Sent: Tuesday, February 29, 2000 3:52 PM
To: Proctor, Linda; Ryan, Sam
Cc: Higgins, Brian P J, , WHS/REF; Gillson, Pete, , WHS/REF; 'leakan, mike Civ Clinic'; Fruit, Ed; Ratcliffe, Mary
Subject: FW: Skyline V Stachybotrys Action Plan 2-29-00
Importance: High

Sam Ryan,

Per our telecon, here is the e-mail Doug said was coming. It is understood from your telephone message that arrangements have been made for agency (DISA) escorts to be available tonight so the clean up can start. As Doug says below, it will take another couple of weeks for the clean up and new tests to be completed so there is no use in having a meeting until then. Please advise DISA officially, including Ina Shepherd.

-----Original Message-----

From: doug.benton@gsa.gov <mailto:doug.benton@gsa.gov>
[mailto:doug.benton@gsa.gov] <mailto:[mailto:doug.benton@gsa.gov]>
Sent: Tuesday, February 29, 2000 3:25 PM
To: KWomack@osd.pentagon.mil; <mailto:KWomack@osd.pentagon.mil;>
trish.gretsky@gsa.gov; <mailto:trish.gretsky@gsa.gov;>
robert.armstrong@gsa.gov <mailto:robert.armstrong@gsa.gov>
Cc: mike.castle@gsa.gov; <mailto:mike.castle@gsa.gov;>
vincent.diportanova@gsa.gov; <mailto:vincent.diportanova@gsa.gov;>
david.polk@gsa.gov; <mailto:david.polk@gsa.gov;> bob.goodman@gsa.gov
<mailto:bob.goodman@gsa.gov>
Subject: Skyline V Stachybotrys Action Plan 2-29-00
Importance: High

Based on a discussion with Trish Gretsky, then Brent Bitz of CE Smith, and then Kent, here is the next phase of the action plan for correcting the stachybotrys situation at the DISA space at Skyline V. All parties have had a chance to do a quick review of the last test results which show we have a few areas that still have stachybotrys. Trish has forwarded the information to PHS in Philadelphia and should get their input soon.

Smith is making arrangements through the contact chain to go back in and intensively clean the spaces still showing stachybotrys. That may start as soon as tonight if escorts can be arranged.

Once Smith reports the cleaning is done, they will have their IAQ consultant do testing and we will have the GSA IAQ contractor do the same testing at the same time.

Unfortunately, this means we should hold off on a general meeting with DISA and all parties until we have the results back, which takes 12 days minimum from when the samples are taken.

However, I believe we can let DISA know that we are making progress and won't stop until we literally get a clean bill of health on the space.

Please pass this forward to all parties in the communications chain. If there are any questions, comments, or things we need to know please reply as soon as possible, thanks

Doug Benton 202-708-7621

DOUGLAS G. BENTON

02/29/2000 03:24 PM

Sent by: Douglas G. Benton

To: KWomack@osd.pentagon.mil, Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA, Robert D. Armstrong/WPD/RW/GSA/GOV@GSA
cc: Michael J. Castle/WPD/RW/GSA/GOV@GSA, Vincent S. Diportanova/WPD/RW/GSA/GOV@GSA, David C. Polk/WPD/RW/GSA/GOV@GSA, Robert W. Goodman/WP/RW/GSA/GOV@GSA

Subject: Skyline V Stachybotrys Action Plan 2-29-00

Based on a discussion with Trish Gretskey, then Brent Bitz of CE Smith, and then Kent, here is the next phase of the action plan for correcting the stachybotrys situation at the DISA space at Skyline V. All parties have had a chance to do a quick review of the last test results which show we have a few areas that still have stachybotrys. Trish has forwarded the information to PHS in Philadelphia and should get their input soon.

Smith is making arrangements through the contact chain to go back in and intensively clean the spaces still showing stachybotrys.
That may start as soon as tonight if escorts can be arranged.

Once Smith reports the cleaning is done, they will have their IAQ consultant do testing and we will have the GSA IAQ contractor do the same testing at the same time.

Unfortunately, this means we should hold off on a general meeting with DISA and all parties until we have the results back, which takes 12 days minimum from when the samples are taken.

However, I believe we can let DISA know that we are making progress and won't stop until we literally get a clean bill of health on the space.

Please pass this forward to all parties in the communications chain. If there are any questions, comments, or things we need to know please reply as soon as possible, thanks

Doug Benton 202-708-7621

2/25/00 09:04 AM

From: Douglas G. Benton

To: Womack Kent WHS/REF" <KWomack@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, Michael Castle/WPD/RW/GSA/GOV@GSA, Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA, Robert D. Armstrong/WPD/RW/GSA/GOV@GSA
Higgins Brian P J WHS/REF" <BHiggins@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, Gillson Pete WHS/REF" <pgillson@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Stallman Marie WHS/REF" <stallmac@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Proctor Linda" <Proctor@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ryan Sam" <SRyan@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Fruit Ed" <EFruit@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ratcliffe Mary" <MRatcliffe@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01

Subject: Skyline Microbial Results

We got an assessment from Trish today as to what the findings mean and what actions we need to take. We should ask Dr. Leaken for his assessment and recommendations. I think we should tell DISA we have again detected stachybotrys on the 9th floor, the experts are analysing the data, and we will have an action plan by next Wednesday, March 1. Thanks

From: Womack Kent WHS/REF" <KWomack@osd.pentagon.mil> AT internet on 02/25/2000 07:07 AM

From: Womack Kent WHS/REF" <KWomack@osd.pentagon.mil> AT internet on 02/25/2000 07:07 AM

To: Douglas G. Benton/WPD/RW/GSA/GOV
Higgins Brian P J WHS/REF" <BHiggins@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, Gillson Pete WHS/REF" <pgillson@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Stallman Marie WHS/REF" <stallmac@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Proctor Linda" <Proctor@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ryan Sam" <SRyan@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Fruit Ed" <EFruit@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ratcliffe Mary" <MRatcliffe@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01

Subject: Skyline Microbial Results

I'm not sure what conclusion we should draw. I see the report but I don't know what readings are bad or how bad or good. I saw that the readings are at a level that is not acceptable to Tish but nothing to panic about. At any rate, I am copying our environmental health experts (Brian Higgins and Pete Gillson) on this e-mail so they can interpret the data and consult with Dr. Leaken (Pentagon PHS Clinic). What should we do?

-----Original Message-----

From: doug.benton@gsa.gov [mailto:doug.benton@gsa.gov]
Sent: Thursday, February 24, 2000 5:40 PM
To: trish.gretskey@gsa.gov

From: dennis.whitworth@charlesesmith.com;
ike@gsa.gov; david.polk@gsa.gov; KWomack@osd.pentagon.mil
Subject: Re: Skyline 5 Microbial Results

File: Microsoft Word 4 >> << File: Paintbrush >>
Trish, what does this mean in terms of what we have to do

up clean

up done? Have you transmitted this to DOD Pentagon Health

Bill G. Es?

Thanks

(Embedded image moved to file: pic17041.pcx) Patricia L.

Patricia

03/14/2000 05:16 PM

To: dennis.whitworth@charlesesmith.com, Douglas G.
Benton/WPD/RW/GSA/GOV@GSA, Michael J.
Benton/WPD/RW/GSA/GOV@GSA,
David C. Polk/WPD/RW/GSA/GOV@GSA
CC:

Subject: Skyline 5 Microbial Results

Tables from microbial sampling performed at Sky 5.
----- Forwarded by Patricia L.

From: WPD/RW/GSA/GOV on

03/14/2000 05:13 PM -----

From: "David O'Konski" <applied@erols.com> AT internet on
03/14/2000 03:03:00 PM

To: Patricia L. Gretskey/WPY/RW/GSA/GOV
CC:

Subject: Skyline 5 Microbial Results

----- NextPart_001_0009_01BF7EDE.EFEBA2E0
Content-Type: text/plain;
Charset=iso-8859-1
Content-Transfer-Encoding: quoted-printable

Attached is the table file you requested.

David

----- NextPart_001_0009_01BF7EDE.EFEBA2E0
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Charset=iso-8859-1
Content-Transfer-Encoding: quoted-printable

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</HEAD>

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file 00000000

requested.</DIV>
<DIV> </DIV>
<DIV><FONT color=3D#000000

file 00000000 David: /></DIV></BODY></HTML>

-- NextPart_001_0009_01BF7EDE.EFEBA2E0--

DOUGLAS G. BENTON

02/03/2000 05:19 PM

Sent by: Douglas G. Benton

To: Anthony Costa/WP/RW/GSA/GOV@GSA, Robert W. Goodman/WP/RW/GSA/GOV@GSA, KWomack@osd.pentagon.mil
cc: Robert D. Armstrong/WPD/RW/GSA/GOV@GSA, Marcia A. Gross/WPD/RW/GSA/GOV@GSA, Michael J. Castle/WPD/RW/GSA/GOV@GSA, John Knight/WPD/RW/GSA/GOV@GSA, Stuart C. Steele Jr./WPC/RW/GSA/GOV@GSA, David C. Polk/WPD/RW/GSA/GOV@GSA, Vincent S. Diportanova/WPD/RW/GSA/GOV@GSA, Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA

Subject: Update on Skyline V - DISA Indoor Air Quality Issues

The is an update of the situation of finding *stachybotrys chartarum* contamination on the 9th floor of Skyline V occupied by DISA.

A progress meeting was held at the DISA location on January 31, 2000 to present findings to date, to make sure all parties had a chance to raise issues, and to make sure the game plan for continued correction of the problem was understood and agreed to by DOD-WHS, DISA, GSA, and Charles E. Smith. Senior representatives from each group were at the meeting as well as the technical experts in IAQ. Dr. Michael Leaham, Director of the Pentagon Civilian Health Service - a specialist in this area - was there plus the GSA and DOD Safety and Health representatives and the IAQ contractor hired by Charles E. Smith and the one now hired by GSA who performed the original tests under contract to DOD.

The summary of the progress meeting is as follows:

The current technical findings on the stachybotrys contamination were discussed. The results of a January 6, 2000 air and wipe sampling test for stachybotrys was handed out, a preliminary finding for this test was previously handed out to all parties. **The results of the test showed of 19 samples, there was still stachybotrys in three areas. However, the quantities are well below the recommended threshold for evacuation of the space.** The model used for that determination is the New York City guideline which sets a threshold of 1000 cfu/m3 (colony forming units per cubic meter) for evacuation. The highest numbers of the test were around one-third of that evacuation guideline. However, the Public Health Service guideline for stachybotrys in occupied space is zero tolerance, meaning no detectable stachybotrys in occupied space. It was agreed that all findings would be issued as they become available to the health professionals from DOD, GSA, and CE Smith who attended the meeting, and that the health professionals would discuss testing protocol plus observe continued testing.

The action plan has three parts.

- 1. Replace the roof and seal all window leaks to stop water infiltration** which causes a wet medium for stachybotrys to grow in. CE Smith began roof replacement January 19, 2000 and has experienced weather delays. The schedule for completion is mid February.
- 2. Clean up all areas of water contamination.** CE Smith will replace ceiling tiles, carpet, walls and wall coverings, and window coverings as necessary. DISA will assist in identifying areas of concern in addition to those previously identified by testing by DOD and CE Smith. That work is underway and ongoing. In addition, DISA raised the specific question of the structural integrity of windows and window framing which may be compromised by wet conditions. CE Smith committed to a structural engineer review of affected areas and will report those findings as soon as available.
- 3. Continued testing for stachybotrys** and other mold spore and bacteria contaminants in DISA spaces.

GSA committed to testing of all rooms and areas of the 9th floor as well as sampling of all GSA leased premises within Skyline V and on area on the ground floor of Skyline IV occupied by DOD elements. That testing is underway the same IAQ contractor used by DOD in November, but now under GSA task order and expense. The first results should be ready for review by mid February.

The group agreed to continually update itself through appropriate communication channels and to meet again to review progress on February 23, 2000 at 1:30 PM at the DISA space on the 9th floor of Skyline V.

Any questions, corrections or additions should sent to me.

Thanks

Doug Benton
Director, NOVA Service Delivery Team



**General Services Administration
National Capital Region
Washington, DC 20407**

SKY 5, 9TH FLOOR

- 03/17/00.....Major roof leak on new section of roof that CES is replacing on Sky 5. This has nothing to do with the old roof leaks. Ms. Helen Creel DISA called CES emergency center at 7:10am and reported the leak.....**no response**, at 8:00am Tracy Terwilliger called me about the leak. I stopped by CES, picked up Ms. Muth, Building Director and went over to Sky 5, 9th fl. Water damage in office 9095 is all along the length of the window side and six feet out. Ms. Muth/CES called the roofing contractors and a professional cleaning service about 8:35am. The in-house cleaner was sent up to the space by 8:20am with a wet vac to dry up the water on the rug and wipe of the furniture. One person wasn't enough to move the furniture. GSA and DOD (Ms. Linda Proctor) called CES again to get more people up here to help with the clean-up. Mr. Bob Armstrong w/GSA was up-dated on the status, we told him we needed more help up here. He put in a call to CES Management, Crystal City to expedite the clean-up. By 9:25am there were CES Engineers on site to move the furniture. The professional cleaning service arrived at 10:20am to wet vac and clean up the area. The roofing contractor was on site by 9:50am. They will be cutting out the part of the roof directly over the leak for repairs. The carpet cleaners will be back in on Sat. the 18th to clean and disinfect the area. Ceiling tile and furniture will be restored Mon. the 20th. Drywall will be checked for any water damage. I left a message with Trish Gretsky to let her know there will be a good possibility this area will need to be checked and to talk with Doug Benton and Bob Armstrong on this matter. **I have pictures too!**
- 03/20/00.....7:50am, room 9095 was cleaned this weekend and the roof repaired but the cans that caught the water and debris from the roof were left in the room all weekend which in turn gave off a rather musty smell throughout the room and some of the hallway. GSA and DOD went directly over to CES office to meet with Craig Gerardi. The cans are to be removed immediately and the drywall which water contacted on Fri. is to be removed and replaced. CES wanted to do the drywall next weekend, this wasn't satisfactory. We need the drywall removed and replaced ASAP. (like today) CES will notify GSA as to the date and time this will be accomplished. Ceiling tiles will be put back in place today and the carpet shampooed again.

03/20/00.....The furniture will be put back as close as possible until the drywall is replaced. This room should have been ready except for removal of the drywall.



**General Services Administration
National Capital Region
Washington, DC 20407**

SKY 5, 9TH FLOOR

- 03/09/00.....Weekend work will be inspected Mon. the 13th by GSA and DOD.
Carpet in Mr. Millers office will be replaced per CES. DISA is picking
new chairs and valance
- 03/15/00..... I conferred with Tina America about the work which was done over the
weekend. I appreciate Tina e-mailing out findings of the weekend work
to all parties since I was home with the flu all week until the 17th.
- 03/17/00.....Major roof leak on new section of roof that CES is replacing on Sky 5.
This has nothing to do with the old roof leaks. Ms. Helen Creel DISA
called CES emergency center at 7:10am and reported the leak.....**no
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know there will be a good possibility this area will need to be checked
and to talk with Doug Benton and Bob Armstrong on this matter.



**General Services Administration
National Capital Region
Washington, DC 20407**

SKY 5, 9TH FLOOR

- 02/29/00.....GSA & DOD reviewed space, as reported 2/22 rooms 9188, 9187A & 9119 still need touch-up painting/9114 need patch cove base/9187A small dent on drywall needs to be patched/9191 drywall by window needs patching from water leak damage/conference room column by window drywall patching needed/copy room-replace wet tile/9209 replace damaged tile.
- 03/1/00.....Took the deficiency dated 02/29/00 above to Bob Moltz, CES Construction Manager and addressed the above problems. He assured me they would be taken care of. CES worked Sky 5, 9th floor the 29th and the 1st after hours. There is a good possibility rugs will be replaced or cleaned again and the fabric furniture will be cleaned as needed.
- 03/02/00.....Reviewed space concerns with DISA-DOD, DOD & GSA.
- * If carpet is replaced in conference room, it must be the same grade and design. (CES said it will be replaced)
 - * After the conference room chairs are cleaned DISA would like them tested. (they are foam padded)
 - * 9112 the external window needs to be cleaned.
- New wood cabinets are being installed in Mr. Millers office today. CES will now notify GSA and we will set up time frames for working in DISA space so personnel will not be interrupted without notice.



**General Services Administration
National Capital Region
Washington, DC 20407**

SKY 5, 9TH FLOOR

02/02/00 DISA called at 2:00pm, water leak in the ceiling in room 9209. Meet with CES & DISA on site. Notified DOD. CES taking care of leak.

02/03/00 Metal refinisher to repair the metal finishes on the damaged window frames. Meet with DOD @ 8:00am on 9th floor.

02/04/00 Structural specialist to inspect window framing structure in conference room 9182, findings to follow. CES, GSA & DOD were on site. GSA DOD checked the progress of the roof replacement, CES states that 20% of the south George Mason Dr. will be complete.
* The structural specialist found the window framing in sound condition. A written report confirming this will follow from CES. CES looked at Room 9209 where the drywall is cracked over the building expansion joint. This is natural movement since the wall didn't have the correct expansion filler joint attached (hard connection instead of flexible). Room 9191 is leaking due to roof work (nothing serious), this may happen in different areas as the roof is being repaired. Checked the roof with CES, work is progressing well considering the weather this week.

02/05/00 CES to repair drywall, paint and replace ceiling tiles.

02/07/00 Metal refinisher has completed rooms 9183-9188. They still have rooms 9167, 91, 89, 93, 81, 13 and 9195 to complete. Helen Creel with DISA is requesting that the wall paper in rooms 9167, 9199 and 9119 be removed and the walls painted. Room 9167 has a small window leak, this is an old leak.

02/08/00 Walked all Sky 5 checking every floor for Govt. personnel. Applied to start testing through out the building on 02/09/00. E-mailed all findings to Trish Gretskey.

02/09/00 DISA called at 7:30am with another leak in room 9157. GSA responded over to Sky 5 and found water had filled up a light fixture and soaked a ceiling tile. The roofers are working right over this space. CES is taking care of the problem. DoD Bldg. Mgt. was notified and responded. Applied will be doing testing today and Thurs. the 10th. All arraignments have been made for them to access spaces.

- 02/10/00 1:30pm, walk through with CES, window cleaner to clean windows. New cleaner worked well on windows. CES will remove all wall covering on the 9th floor per Ms. Creel request (see letter). Room 9209 is having a flexible expansion joint added to the drywall (see 02/04/00).
- 2/14/00 Called Tracy Terwilliger w/DISA to see if any leaks penetrated the roof this weekend. None have been reported. Window framers to work Sat. 19th to refinish windows. Window cleaners to work during the week (daytime). All wallpaper was removed 02/12/00, except for room 9199 (this will be done at a later date), sanding and painting will be done the weekend of the 19th. On the roof, all water proofing is complete (unofficially), flashing and insulating will be put down this week.
- 02/15/00.....DISA/DOD approved replacing the cabinet in room 9173
- 02/17/00.....Refinish mullions (window frames), sand & prime repaired areas and strip wallpaper backing in room 9119 (this will be completed after hours).
- 02/18/00.....Painting in repaired areas (after hours). CES has asked for an extension on the Cure letter for roof leak repair at Sky 5. Their request was reviewed and granted through Friday, March 10, 2000. The date provides for several additional days in case of delays due to inclement weather. On site inspection by all parties involved to survey progress of construction work.
- 02/22/00.....Walk through with CES, DOD and GSA Sky 5, 9th floor. Room 9167 walls were not skimmed/prepared before painting, cove base and carpets need cleaning. Room 9191 new paint peeling off the window frame. Room 9198 ceiling tile needs replacing and corner moulding put back. Room 9188 wall needs paint touch-up, looks like they did a rush job. Room 9187A painting is good but the furniture was banged up against the wall when put back in place leaving one small hole and a black mark on the newly painted wall. Room 9182 the side wall does not look like it was painted/or marks on the wall faded through new paint and new paint coming up from the window frame. Room 9181 new paint peeling from window frame. Room 9114 room all painted, looks good. Room 9119 both side walls need touch-up painting and ceiling tile needs to be replaced. CES is addressing the painting and the peeling of the new finish on the window frames. ** *An inspection was done of all DISA space in Skyline except for Sky 3 which will be done at a later date. CES wanted to see if there are any concerns in these areas. GSA, DOD, DISA Real Estate & Facilities & CES.*

- 02/24/00.....GSA, CES & DISA/DOD checked the refinishing of the window frames. What has been completed looks excellent.
The carpet will arrive today for the offices that require replacement.
It will not be installed until all the painting is complete.
A sample of blue was taken from the office by the conference room.
The color should have been grey to match the hall and offices, if this becomes a problem CES will address it. The conference room drapes are going out today to be cleaned.
- 02/29/00.....GSA & DOD reviewed space, as reported 2/22 rooms 9188, 9187A & 9119 still need touch-up painting/9114 need patch cove base/9187A small dent on drywall needs to be patched/9191 drywall by window needs patching from water leak damage/conference room column by window drywall patching needed/copy room-replace wet tile/9209 replace damaged tile.
- 03/01/00.....Took the deficiency dated 02/29/00 above to Bob Moltz, CES Construction Manager and addressed the above problems. He assured me they would be taken care of. CES worked Sky 5, 9th floor the 29th and the 1st after hours. There is a good possibility rugs will be replaced or cleaned again and the fabric furniture will be cleaned as needed.
- 03/02/00.....Reviewed space concerns with DISA-DOD, DOD & GSA.
* If carpet is replaced in conference room, it must be the same grade and design. (CES said it will be replaced)
* After the conference room chairs are cleaned DISA would like them tested. (they are foam padded)
* 9112 the external window needs to be cleaned.
New wood cabinets are being installed in Mr. Millers office today.
CES will now notify GSA and we will set up time frames for working in DISA space so personnel will not be interrupted without notice.
- 03/03/00.....CES Construction to work Sat. 4th on list of 2/29 above.
- 03/06/00.....Sat. work consisted of about ten minutes. The column in the conference was fixed and some paint put over the dent in room 9197A. CES will have the painter, tile man and the cabinet man on site the 7th/Tuesday.



AAS Environmental, Inc.
Environmental Engineering Consultants
A Consolidated Engineering Affiliate

Ling Ling Hung
JP (215) 861-4121

FAX TRANSMITTAL

DATE: March 10, 2000
TO: Trish Gretskey
COMPANY: GSA
FAX #: 202/708-6618
FROM: Jonathan Schatz
RE: Work Plan for Skyline 5, Fungus Decon

Mark McGrail
JY (703) 648-0575

NUMBER OF PAGES INCLUDING THIS COVER: 2

REMARKS:

As requested, here's a general work plan for the procedures that will be used for this weekend's cleaning in Skyline 5. Jim Foster and I plan to make several site visits during the cleaning and I will be there during the clearance sampling on Sunday.

Let me know if you have any other concerns or suggestions.

Jon

2

Work Plan for Skyline 5
Stachybotrys Remediation
March 10-12, 2000

The following procedures will be used for the cleaning of the Conference Room (9181), and Rooms 9182, 9112, 9180, 9110, 9180A, 9210, 9201A, and Room 105 (Skyline 4, Suite 110).

1. Each work area will be sealed using critical barriers consisting of one layer of 6-mil polyethylene sheeting. A one-stage decontamination chamber will be placed at each entrance.
2. Microtraps equipped with HEPA filters will be placed in the areas to establish negative pressure in each enclosure.
3. Workers will wear disposable clothing and respiratory protection appropriate for the contaminants and cleaning chemicals present in the areas.
4. Occupant personal items will be placed in boxes and removed from the rooms.
5. After the building ventilation system shuts down for the evening, chairs with fabric cushions in the conference room and in Room 9182 will be wrapped in plastic and removed from the areas for disposal.
6. Where not previously conducted, holes will be cut in drywall partitions to check for hidden areas of growth or contamination. Areas above ceilings will also be thoroughly inspected. If found, all growth will be removed.
7. In Room 105, the office and the area beneath the raised floor will be inspected for signs of microbial growth. If gross contamination is encountered, it may be necessary to delay remediation of this area until sufficient time is available to allow proper access beneath the raised flooring throughout the area.
8. All surfaces in each room will be cleaned using a 5-10% bleach solution.
9. Carpeting in the conference room will be removed and wrapped in plastic for disposal. All other carpeting will be cleaned using a HEPA filtered environmental vacuum equipped with a carpet beater attachment.
10. Following all investigation and cleaning, the microtraps will continue to run in each area for approximately 12-24 hours. The traps will then be shut off to allow a settling period of approximately 12 hours prior to clearance testing on Sunday, March 12. Side-by-side viable air testing will be performed by the GSA hygienist (Applied Environmental) and The Environmental Group.



AAS Environmental, Inc.
Environmental Engineering Consultants
A Consolidated Engineering Affiliate

Cleaning protocol

FAX TRANSMITTAL

DATE: March 8, 2000
TO: Trish Gretskey
COMPANY: GSA
FAX #: 202/708-6618
FROM: Jonathan Schatz
RE: MSDS Information for Skyline 5, Fungus Decon

NUMBER OF PAGES INCLUDING THIS COVER: 20

REMARKS:

As requested, attached are the MSDS sheets for the bleach solution, Ozine and Foster 40-80 that The Environmental Group plans to use for the cleaning this coming weekend out at Skyline 5. Let me know if the faxed pages come through too poorly to read. I can always have them sent to you directly.

Property management is preparing an updated action plan that will be sent out for GSA to review and approve. I'll make sure you get a copy. Let me know if you have any questions or suggestions.

Jon

CHECK OUT THE FACTS

✓ EPA Registered
Specifically for HVAC
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✓ Tested and Proven
Effective Against a
Broad Spectrum of
Microorganisms

✓ Eliminates Odors

✓ Leaves No Toxic
Chemical Residue or
Odor

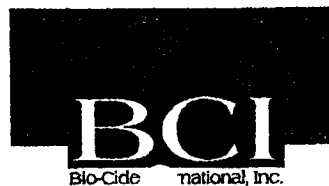
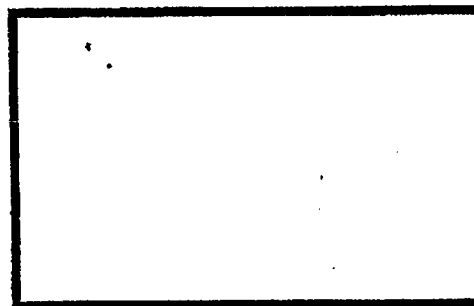
✓ Easy to Apply - No
Rinsing Required

✓ Lowest Precautionary
Statement Assigned by the
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- HVAC and Air Duct Sanitation
- Fire Restoration
- Water\Flood Damage
- Walls, Floors, Ceilings
- Sewer Backup Contamination
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Oxine[®] has been proven effective against a broad spectrum of bacteria, mold, mildew, viruses, fungi, and algae.

When prepared according to label instructions, Oxine[®] eliminates microorganisms of human health concern in minutes or seconds, rather than the long contact times required with other sanitizing products.

Microbial
Sampling
Before
Sanitizing

TOXICITY & SAFETY

The most significant feature of Oxine[®] is the low toxicity and safety of the product. Oxine[®] concentrate has been assigned an acute toxicity rating of Category III by the EPA. This requires that the Oxine[®] label carry only a precautionary statement of "Caution". By comparison, a Category I rating, denoting the highest acute toxicity, requires a "Danger" statement. A Category II rating requires a "Warning" statement.

After treatment of the air handling system, Oxine[®] quickly degrades to non-volatile compounds leaving no active chemical residual. Other products may linger, possibly releasing chemicals into the air flow, which could be more harmful to building occupants than the original contaminants.

EPA REGISTERED

EPA Reg. No. 9804-1
Est. No. 9804-OK-1

Oxine[®] is registered by the EPA specifically for the sanitation and deodorization of HVAC systems and duct work. Many manufacturers of sanitizing and hard surface disinfectants will market their products as acceptable for use in HVAC systems. However, it is important to note that it is a violation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), to use any product in a manner that is not consistent with its labeling.

APPLICATION

Oxine[®] is easily applied with the use of a handheld fogger or air driven spray. In either case, it is important that the mist of Oxine[®] is transferred throughout the pre-cleaned system completely covering the interior surface.

Both commercial and residential air handling systems should be treated annually with Oxine[®] to eliminate microbial growth.

If you would like additional information concerning Oxine[®] and its ability to help you achieve better Indoor Air, give us a call and discover --

The Proven

Pluti

THE NEED FOR SANITATION

Bacteria, mold, mildew, fungi, yeasts and algae are everywhere in our everyday environment. The condensate which forms on the cooling coils, drip pan and duct work of air handling systems creates an ideal environment for the growth of these microorganisms. When applied to a pre-cleaned system, Oxine[®] is extremely effective in reducing the harmful potential associated with this microbial contamination.

010

ENVIRONMENTAL GROUP + CES

ENVIRONMENTAL BUILDING SERVICES

03/08/00 10:29 FAX 301 937 3611
02/28/00 MON 15:29 FAX 12155477800

BIO-CIDE INTERNATIONAL, INC.**PRODUCT: Oxine®**2845 Broce Drive
Norman, Oklahoma 73072 U.S.A
(405) 329-5556

Fax: (405) 329-2681

MATERIAL SAFETY DATA SHEET

TRANSPORTATION EMERGENCY 24 HOUR TELEPHONE: (800) 424-9300 (CHEMTREC)

SECTION I: PRODUCT IDENTIFICATION

OCTANOL/WATER PARTITION COEFFICIENT: NE

PRODUCT NAME: Oxine®**EVAPORATION RATE:** Comparable to Water**SOLUBILITY IN WATER:** Complete**pH, CONCENTRATE:** 8.0 to 8.5**CHEMICAL FAMILY:** Mixture of Oxychlorine Compounds**OTHER DISTINGUISHING CHARACTERISTICS:** N/A**SYNONYMS:** N/A **CAS #:** None (Mixture)**NFPA RATING:** [with 0 for no hazard to 4 for life threatening]**Fire:** 0 **Health:** 1 **Reactivity:** 1 **Special:** None**SECTION IV: FIRE AND EXPLOSIVE HAZARD INFORMATION****WARNING STATEMENT:** Product may cause eye and skin irritation.**FLASH POINT:** None to solution boiling point.**Method:** N/A**EPA REGISTRATION NUMBER:** 9804-1**FLAMMABLE LIMITS (% By Volume):****Lower:** N/A **Upper:** N/A**REVISION DATE:** July 12, 1995**SUPERSEDES:** June 1994**AUTOIGNITION TEMPERATURE:** N/E**SECTION II: HAZARDOUS INGREDIENTS****DECOMPOSITION TEMPERATURE:** N/E (For dry sodium chlorite: 180 - 200°C)**INGREDIENT [CAS #]**

	PERCENT	OSHA ACGIH				OTHER
		PEL	TLV	STEL		
Sodium Chlorite [7758-19-2]	3.35 Minimum	NE	NE	NE		Inhalation
Chlorine Dioxide [10049-04-0]	Trace	0.1 PPM	0.1 PPM	0.3 PPM	SARA 313	

TOTAL 3.35**NE = NOT ESTABLISHED NL = NOT LISTED**
(C) = IDENTIFIED AS A CARCINOGEN BY OSHA,
IARC, NTP, OR ROTECS**FIRE EXTINGUISHING MEDIA:** Water unless contraindicated by other material involved in fire.**FIRE-FIGHTING EQUIPMENT:** Standard protective gear with self-contained breathing apparatus.**SPECIAL FIRE-FIGHTING PROCEDURES:** Do not allow Oxine® solutions to evaporate to dryness. If chlorine dioxide gas is produced, vent to atmosphere. Open or vent any large containers of Oxine®.

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not classified as "Hazardous" per this OSHA Standard may be listed. The identity of other ingredients will be made available as provided in this standard.

SECTION III: PHYSICAL/CHEMICAL DATA**APPEARANCE AND ODOR:** Clear liquid with very faint chlorinous odor**UNUSUAL FIRE OR EXPLOSIVE HAZARDS:** The sodium chlorite in dried Oxine® is a strong oxidizer, which supports combustion. Chlorine dioxide, which may evolve from Oxine® solutions, is explosive in the gaseous phase at concentrations greater than 10% by volume. Do not allow chlorine dioxide gas to accumulate within a confined space.**SECTION V: REACTIVITY DATA****BOILING POINT:** 213°F (100.5°C)**MELTING POINT:** N/A**STABILITY:** Product is stable.**VAPOR PRESSURE:** 23.7 mm Hg (25°C)**VAPOR DENSITY:** 0.02 kg/m³**CONDITIONS TO AVOID:** Avoid storing product under conditions in which it could evaporate to crystalline salt.**SPECIFIC GRAVITY:** 1.03 g/ml (20°C)**INCOMPATIBLE MATERIALS:** Avoid accidental contact with acids, chlorine compounds, hypochlorites (bleach), sulfur and sulfite compounds, phosphorus, organic solvents, and combustible/flammable materials.**VOLATILE ORGANIC COMPOUNDS:** <0.1% by weight

chlorine compounds and primary irritant
dioxide gas.

HAZARDOUS POLYMERIZATION: Does not occur.

SECTION VI: HEALTH HAZARD DATA

INGESTION: Rat Oral LD 50: 4,360 mg/kg. Ingestion may produce gastric discomfort, nausea, vomiting, and diarrhea. Intake of large quantities may produce methemoglobinemia.

EYE CONTACT: Based on rabbit studies, Oxine® has been given an EPA Category III rating as a mild irritant. Exposure can produce slight irritation of conjunctiva, cornea, and eyelid.

SKIN CONTACT: Based on rabbit studies, Oxine® is listed as "practically not an irritant". Prolonged exposure may produce localized irritation, contact dermatitis, mild erythema, and edema.

SKIN ABSORPTION: Highly unlikely to be absorbed through skin in toxic amounts. Rabbit Acute Dermal LD 50 > 2,020 mg/kg.

INHALATION: Acute Inhalations LC 50 > 5.61 mg/l. Prolonged inhalation of fog or mist containing Oxine® may be irritating to nose and throat.

SYSTEMIC AND OTHER EFFECTS: None known.

CHRONIC EXPOSURE EFFECTS: May cause localized irritation to areas exposed to product.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Skin disorders, such as dermal allergies and dermatitis. Exposure to chlorine dioxide produced by activation can aggravate pulmonary disorders, such as emphysema.

CARCINOGENICITY: Active ingredients are not listed by ROTECs, OSHA, IARC, or NTP. No evidence to date implicating product as carcinogen or tumor promoter.

MUTAGENICITY: Though product active ingredient is a chemical oxidant, no evidence to date for mutagenicity from whole animal or *in vitro* studies.

REPRODUCTIVE EFFECTS: No known effects to date.

OTHER HEALTH HAZARDS/HEALTH EFFECTS: None known.

SECTION VII: FIRST AID

TARGET ORGANS: Skin, eyes. For chlorine dioxide produced from activation: respiratory tract and exposed mucous membranes.

SYMPTOMS OF OVER-EXPOSURE: Skin and eye irritation. Exposure to chlorine dioxide from activation can produce coughing, sore throat, headache, and dizziness.

SKIN CONTACT: Wash affected area thoroughly with soap and water. Remove contaminated clothing and rinse thoroughly with water before laundering or discard. If irritation occurs, seek medical attention.

EYE CONTACT: Flush eyes thoroughly with water, making certain eyelids are held open. If irritation or burning persists, seek medical attention.

INHALATION: Unactivated Oxine® normally has no respiratory effects. If exposure to chlorine dioxide produced from activation occurs, remove victim to fresh air. Contact a physician if respiratory distress continues.

INGESTION: DO NOT INDUCE VOMITING. Contact a physician or Poison Control Center immediately.

PLEASE NOTE: Above procedures are recommended as emergency first aid precautions only. They are not intended to replace or supplant the treatment advice of a physician or other authorized health care specialist.

SECTION VIII: CONTROL MEASURES/PERSONAL PROTECTION EQUIPMENT

VENTILATION: Open air or good room ventilation is normally adequate for safe use of this product. Avoid breathing any vapors or fumes resulting from acid activation.

RESPIRATORY PROTECTION: In accordance with OSHA regulations (29 CFR 1910.134 and 29 CFR 1910.1000), fogging or spraying applications may require worker respiratory protection, such as: (1) NIOSH/MSHA approved air-purifying respirators, or (2) NIOSH/MSHA approved canister/cartridge facial respirators rated for chlorine/acid vapors or specified for chlorine dioxide.

EYE PROTECTION: Good manufacturing practice recommends use of chemical safety goggles for all applications involving chemical handling.

PROTECTIVE CLOTHING: Good manufacturing practice recommends that, at a minimum, rubber, neoprene, or other chemically impervious gloves be worn for all applications involving chemical handling.

OTHER PROTECTIVE MEASURES: Product should be stored and applied in close proximity to a safety shower, chemical eyewash station, or other fresh water source.

SECTION IX: SPILL, LEAK, AND DISPOSAL PROCEDURES

ENVIRONMENTAL NOTIFICATION: All spills and leaks involving more than 10 gallons should be reported to the nearest regional EPA office or designated state emergency response office within 24 hours. Spills from ocean vessels or which may contaminate U.S. coastal waterways should be reported to the nearest Coast Guard office within 24 hours.

gallons, may be flushed to a designated and permitted sewer system with copious amounts of water. Larger spills should be contained and neutralized with sodium bisulfite or sodium thiosulfate (1.2 lbs neutralizer per each estimated lb. of spilled material) or disposed of as chemical waste in the manner indicated below. The vicinity of the spill should be thoroughly flushed with water after clean-up. At no time should the spilled material be allowed to dry to a crystalline salt. Do not discharge this product to storm drains or to any surface or groundwater sources unless specifically allowed under a valid NPDES permit.

DISPOSAL PROCEDURE: Small quantities, less than 10 gallons, may be flushed to an authorized and permitted sewer with copious amounts of water. Larger volumes should be taken to an authorized chemical disposal site (Class I or landfill) in accordance with all federal, state, and local regulations. Consult with selected facility regarding the need for prior neutralization of waste.

SECTION X: SPECIAL PRECAUTIONS

PRODUCT STORAGE: Store in a cool, dry, well-ventilated location away from acids, chlorine and chlorine compounds, hypochlorites (bleach), organic solvents, sulfur and sulfite compounds, phosphorus, combustible/flammable materials, and direct sunlight. Keep containers tightly closed when not in use and open carefully to prevent spillage. Storage on wooden floors and pallets is not recommended.

PRODUCT HANDLING: Use product only as directed by the label or by your authorized Bio-Cide representative. Avoid contact with skin and eyes; avoid breathing any vapors or fumes resulting from product activation. Wash thoroughly after handling. Thoroughly rinse all protective gear and handling equipment, such as transfer pumps and lines, with water prior to reuse or storage. Keep away from children, animals, and unauthorized personnel.

OTHER PRECAUTIONS: Product may bleach clothing and fabric materials, such as draperies and carpets.

SECTION XI: REGULATORY STATUS

Federal EPA Regulations

TSCA: All product ingredients are on inventory.

SARA TITLE 312/313: Neither the product nor its constituent ingredients are listed under SARA reporting requirements. Chlorine dioxide produced from activation is listed under SARA 313.

FIFRA: Oxine® is an EPA registered sanitizer (EPA No. 9804-1)

RCRA: Not considered a hazardous waste either categorically or by chemical listing.

CLEAN WATER ACT: Neither product nor constituent ingredients is listed as priority pollutant.

CLEAN AIR ACT: Neither product nor constituent ingredients is listed as priority pollutant.

Neither product nor constituent ingredients is classified as an acute or chronic health hazard by OSHA. Chlorine dioxide produced by activation is regulated with an air exposure limit of 0.1 ppm TLV and 0.3 ppm STEL.

Federal Department of Transportation

Not regulated.

State Laws

CALIFORNIA: Not regulated under the provisions of Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986).

NEW JERSEY: Sodium Chlorite is listed under New Jersey's Chemical Inventory Notification Requirement (NJAC 7:12). Estimated release notification, however, is not required.

PLEASE NOTE: Regulatory requirements are subject to change and may vary from one location to another. It is the users responsibility to ensure compliance with all applicable federal, state, and local regulations pertaining to the purchase, transport, storage, use, and disposal of this product.

The information contained in this Material Safety Data Sheet has been assembled by the manufacturer, based on its own studies and on research accomplished by others. The manufacturer gives this information without warranty, expressed or implied. The information contained herein is accurate as of the date posted, to the best knowledge of the manufacturer.

Foster®**PRODUCT DATA**
40-80*An H.B. Fuller Company***PROPERTIES****TYPE**

Quaternary Ammonium Chloride

VOLATILE

Water

AVERAGE WEIGHT / U.S. GALLON (ASTM D 1475)

8.2 lbs. (.98 kg/l)

APPLICATION CONSISTENCY

Wipe, or Coarse Spray

ODOR

Mild, pleasant odor when wet, none when dry.

AVERAGE COVERAGE RANGE

Dependent upon the method of application and the surface. Apply in sufficient quantity to insure that the surface remains wet continuously for at least ten (10) minutes.

ALKALINITY (ASTM E-70)

9.6 pH

SAFETY

Wet flammability (ASTM D-3278)

No flash to boiling, 212°F, (100°C)

@Trademark of Foster Products Corporation

FSTM: Foster Standard Test Method

OE/OE-BM

FOSTER 40-80
HVAC & WALL DISINFECTANT

FOSTER 40-80 HVAC & Wall Disinfectant is a disinfectant-cleaner-fungicide-mildewstat-virucide-deodorizer designed for hospital, institutional, commercial, and industrial use.

FOSTER 40-80 HVAC & Wall Disinfectant is an EPA Registered formulation, a full strength disinfectant, and comes in a convenient ready-to-use dilution. 40-80 has been evaluated in the presence of 5% serum by the AOCA Use-Dilution test and found to be effective against a broad spectrum of gram-negative and gram-positive organisms.

FOSTER 40-80 HVAC & Wall Disinfectant offers user safety in that end-users need not work with a corrosive and sometimes dangerous concentrate. 40-80 carries "CAUTION" as a signal safety word.

FOSTER 40-80 HVAC & Wall Disinfectant comes full strength for effective and economical use. Concerns about underdilution or over production and disposal are eliminated.

LIMITATIONS

Do not store or apply to surfaces below 32°F (0°C) or above 100°F (38°C).

For use on hard (inanimate) non-porous surfaces. Not recommended for use on duct liner insulations. Consult the material safety data sheet for additional information.

EPA REGISTRATION NO. 6836-152-63836**EPA ESTABLISHMENT NO. 63836-TX-001****FOR INDUSTRIAL USE ONLY.**
KEEP OUT OF REACH OF CHILDREN.
DO NOT DILUTE.**Foster** Products Corporation

2900 Granada Lane, Oakdale, MN 55128

APPLICATION GUIDE FOR FOSTER 40-80 HVAC & WALL DISINFECTANT

MATERIAL PREPARATION

DO NOT DILUTE! FOSTER 40-80 HVAC & Wall Disinfectant comes full strength. Any attempt to dilute will drastically reduce the efficacy of the material.

SURFACE PREPARATION

Remove all accumulations of dirt, grease or contamination prior to the application of 40-80.

SITE PREPARATION

Follow all procedures mandated by Federal, State, and local authorities regulating the use of EPA Registered disinfectants, if any.

APPLICATION

Apply FOSTER 40-80 HVAC & Wall Disinfectant to the interior of HVAC ductwork and related air handling equipment and, other hard, (inanimate) non-porous surfaces by spray or wipe. Insure that 40-80 comes in direct contact with the surface to be treated and that the treated surface remains wet for at least 10 minutes.

NOTE: Where mist or vapors may be generated, proper ventilation must be provided in accordance with good ventilation practices. In the absence of proper environmental controls, a NIOSH/MSHA jointly approved respirator is advised.

SPRAY EQUIPMENT

Because of the low viscosity of 40-80, it can be applied with virtually any type of coarse spray equipment on the market today. For additional information, contact your Foster Area Manager or your Foster Indoor Air Quality Materials distributor.

CLEAN-UP

Thoroughly rinse all equipment with tap water until all evidence of 40-80 is eliminated. Dispose of saturated wipes in accordance with local regulations. Triple rinse (or equivalent) containers. If spilled, dike and contain with inert materials (sand, earth, etc.) and transfer the liquid and solids separately to containers for recovery or disposal. See Material Safety Data Sheet for more information on disposal.

PRECAUTIONS

Wear safety glasses to reduce the potential for eye contact; chemical safety goggles are appropriate if splashing is likely. Have eye washes available where eye contact can occur. Prevent prolonged or repeated contact with skin by using rubber gloves and appropriate protective clothing. Respiratory protection is not normally required. Use NIOSH/MSHA jointly approved respirator if conditions warrant. Harmful if swallowed. Consult Material Safety Data Sheet and container label for further information.

KEEP OUT OF REACH OF CHILDREN.



CUSTOMER SERVICE—800-231-9541 OR 800-338-2975 INTERNATIONAL BUSINESS—305-971-8600

IMPORTANT: Foster Products Corporation warrants that each of its products will be manufactured in accordance with Foster's specifications in effect on the date of manufacture. FOSTER MAKES NO OTHER WARRANTIES AND EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a product fails to meet this limited warranty, purchaser's sole and exclusive remedy is replacement of the product or, at Foster's option, refund of the purchase price. FOSTER'S ACCEPTANCE OF ANY ORDERS FOR THIS PRODUCT IS EXPRESSLY CONDITIONAL UPON PURCHASERS' ASSENT TO THE TERMS ON THE APPLICABLE INVOICE.

ADEQUATE TESTS: The information contained herein we believe is correct to the best of our knowledge and tests. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that adequate tests be performed by you to determine if this product meets all of your requirements. The warranted shelf life of Foster products is six months from date of shipment to the original purchaser.

For industrial use only. Keep out of reach of children.

Consult Material Safety Data Sheet and container label for further information.

♻️ Recycled with 20% Post Consumer Fibers

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Date Printed: 19 April 1999

Page 1 of 5

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY INFORMATION

Foster Products Corporation
H.B. Fuller Company Subsidiary
2900 Granada Lane
Oakdale, MN 55128
Phone: 651-236-3785
Fax: 651-236-3781

MSDS INFORMATION

Preparation Date: 25 April 1998
Supersedes: 11 November 1997
Prepared By: Industrial Hygiene
Phone Number: 651-236-5842

Medical Emergency Phone Number: 1-888-853-1758
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

PRODUCT INFORMATION

Product Name/Number: FOSTER 40-80 DISINFECTANT
Trade Name: HVAC AND WALL DISINFECTANT
Product Description (product use): DISINFECTANT

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS). Unlisted ingredients are not 'hazardous' per the OSHA standard and/or are not found on the WHMIS ingredient disclosure list.

See Section 16 for additional information.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

No specific warnings for normal use conditions.

POTENTIAL HEALTH EFFECTS

Eyes: Eye contact may cause irritation.

Skin: Prolonged or repeated contact may cause irritation.

Inhalation: Inhalation is not an anticipated route of exposure.

Ingestion: Not an anticipated route of exposure. Harmful if swallowed.

FD-4080

Date Printed: 19 April 1999

Page 2 of 5

Chronic: No anticipated chronic effects.

REGULATED CARCINOGEN STATUS: Unless noted below, this product does not contain regulated levels of NTP, IARC, ACGIH or OSHA listed carcinogens.

Existing Health Conditions Affected by Exposure: No known effects on other illnesses.

SECTION 4: FIRST AID MEASURES

If in eye: Flush immediately with large amounts of water for at least 15 minutes. Call a physician.

If on skin: Wash affected area with soap and water. Launder contaminated clothing before reuse.

If vapors inhaled: Remove subject to fresh air. Call a physician.

If ingested: If person can swallow, give one glass of water or milk. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point/Method: >200 degrees F SETA

Upper Explosive Limit/Lower Explosive Limit: Not applicable

Autoignition Temperature: Not applicable

Appropriate Extinguishers: Liquid material - nonflammable

Special Fire Fighting Procedures: Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.

Unusual Fire and Explosion Hazards: None known.

Hazardous Combustion Product: Incomplete combustion can yield low molecular weight hydrocarbons, carbon monoxide

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Contain spill, dilute if necessary and remove with inert absorbent.

SECTION 7: HANDLING AND STORAGE

HANDLING INFORMATION

Wear appropriate protective equipment when working with this product.

FD-4080

Date Printed: 19 April 1999

Page 3 of 5

STORAGE INFORMATION

Consult the Technical Data Sheet for specific storage instructions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Wear safety glasses to reduce the potential for eye contact; chemical safety goggles are appropriate if splashing or dusting is likely. Have eye washes available where eye contact can occur.

Skin Protection: Prevent contact by using rubber gloves and appropriate protective clothing. Launder contaminated clothing before reuse. Provide safety showers.

Respiratory Protection: Not normally required. Use NIOSH/MSHA approved respirator if conditions warrant.

Ventilation: General dilution ventilation.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	LIQUID
Color:	LIGHT GREEN
Odor:	SWEET; PERFUME
Odor Threshold:	Not established
Weight per Gallon:	8.32 lbs.
Specific Gravity:	0.98
% Solids by Weight:	0.2
pH:	9.65
Boiling Range:	Not established
Freezing/Melting Point:	Not applicable
Vapor Pressure:	Not established
Vapor Density:	Not established
Evaporation Rate:	Not established
Water/Oil Partition Coefficient:	Not established

VOC: 0.2 g VOC/liter of material
(VOC theoretically determined using EPA Publication 450/3-84-019)

VOC, less water: 39.7 g VOC/liter of material, less water and exempt solvents
(VOC theoretically determined using EPA Publication 450/3-84-019.)

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: Stable

Incompatibility: Not established

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BULLSEYE ENVIRONMENTAL

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FD-4080

Date Printed: 19 April 1999

Page 4 of 5

Hazardous Decomposition: Not established

Hazardous Polymerization: Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

No data available

SECTION 12: ECOLOGICAL INFORMATION

No data available

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Solidify and dispose of in an approved landfill. Consult state, local or provincial authorities for more restrictive requirements.

SECTION 14: TRANSPORTATION INFORMATION

UNITED STATES DEPARTMENT OF TRANSPORTATION (DOT)

DOT Proper Shipping Name: NOT REGULATED

It is our opinion that the information provided here may be used to transport this product in compliance with Canadian Transportation of Dangerous Goods.

INTERNATIONAL TRANSPORTATION

IATA Proper Shipping Name: NOT REGULATED

IATA Label: NOT REGULATED

SECTION 15: REGULATORY INFORMATION

FEDERAL

Toxic Substances Control Act (TSCA)

Section 8(b) - Inventory Status

This product is in compliance with the Toxic Substances Control Act's Inventory requirements.

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BULLSEYE ENVIRONMENTAL

FD-4080

Date Printed: 19 April 1999

Page 5 of 5

SARA TITLE III

Section 313: This product does not contain regulated levels of any toxic chemical subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372.

STATE REGULATIONS

California Proposition 65: This product contains chemical(s) known to the state of California to cause cancer (c) or reproductive (r) damage.

<0.0172% Ethyl alcohol (r) 64-17-5
in alcoholic beverages
listed October 1, 1987

WHMIS IDENTIFICATION/OTHER INTERNATIONAL REGULATIONS

D2B

SECTION 16: ADDITIONAL INFORMATION

HMIS RATING

Health-1 Flammability-0 Reactivity-0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to Foster Products Corporation from its suppliers, and because Foster Products Corporation has no control over the conditions of handling and use, Foster Products Corporation makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and Foster Products Corporation assumes no responsibility for use or reliance thereon. It is the responsibility of the user of Foster Products Corporation products to comply with all applicable federal, state and local laws and regulations.

05-22-99 11:53

Material Safety Data Sheet (M.S.D.S.) • ^{ID=}REV. 07/19/90 • page 1

P.02

HYPOCHLORITE SOLUTION

***A.K.A. Soda Bleach Solution

Manufactured by:

H. Krevit & Company, Inc.

73 Welton Street • New Haven, CT 06511

Toll Free: 1-800-922-6626 • Local (203) 772-3350 • Fax: (203) 776-0730

M.S.D.S. Number: 0236

Date: 07/19/95

Edition: 003

Trade Name: Soda Bleach Solution

Chemical Name/synonyms: Sodium Hypochlorite- Aqueous Solution (5-15%)

Chemical Family: Inorganic Salt

Formula: NaOCl

CAS Number: 007681 52 9

D.O.T. Shipping Name: Hypochlorite Solution

D.O.T. Hazard Class: Corrosive Material

Subsidiary Risk: N/A

I.D. number: UN1791

Reportable Quantity (R.Q.): 100 Lbs./45.4 K.G.

Canadian Dangerous Goods Description - Shipping Name: Hypochlorite Solution

Primary Classification: Class 8, Subsidiary Class: 9.2,

Pin Number: UN1791, Packing Group: III

Whmis Classification: Class E - Corrosive Material

SECTION 1 • PHYSICAL DATA

Boiling Point @ 760 MM HG: Decomposes

or Density (Air=1): N/A

Specific Gravity (H₂O=1): 1.21 @ 20 C

*** 24-Hour Emergency Assistance: CHEMTREC (800) 424-9300 ***

05-22-99 11:53

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P.03

PH of Solutions: Approx. 13**Freezing/melting Point:** -14 C (6 F)**Solubility (weight % in water):** complete**Bulk Density:** 8.8 lbs./gal. (U.S.) [11.4 - 12.1 lbs./Imperial gal.]**Volume % Volatile:** complete**Vapor Pressure:** 17.5 MM HG @ 20 C**Evaporation Rate:** (Water = 1): 1**Heat of Solution:** N/A**Appearance and Odor:** Clear, pale yellow or greenish liquid with a chlorine odor.

SECTION 2 • INGREDIENTS

Material	Percent
Sodium Hypochlorite (as avail. chlorine)	5 - 15
Sodium Hydroxide	Approx. 1
Water	Balance

SECTION 3 • FIRE/EXPLOSION HAZARD DATA

Flash Point (method used): Non-flammable**Flammable Limits in Air (% by volume):** LEL: N/A UEL: N/A**Extinguishing Media:** N/A**Special Fire Fighting Procedures:** Firefighters should wear NIOSH/MSHA approved pressure-demand, self contained breathing apparatus. Use water spray to cool fire-exposed containers.**Unusual Fire and Explosion Hazards:** Can decompose to form irritating chlorine gas and oxygen.

SECTION 4 • HEALTH HAZARD DATA

Toxicity Data:

LC50 Inhalation: Not Established

LD50 Dermal: Not Established

Skin/Eye Irritation: Not Established

LD50 Ingestion: (rat) 8.91 Mg./Kg (12% Solution.)

Fish, LC50 (Lethal Concentration): Unknown

Classification: (Poison, Irritant, etc.)

Inhalation: Corrosive

Skin: Corrosive

Skin/Eye: Corrosive

Ingestion: Corrosive

Aquatic: Unknown

*** 05-22-99 11:53 *** CHEMTEC (000) 024 0200 ***

SECTION 5 • EFFECTS OF OVEREXPOSURE

This section covers effects of overexposure for inhalation, eye/skin contact, ingestion and other types of overexposure information in the order of the most hazardous and the most likely route of overexposure.

Is chemical listed as a carcinogen or potential carcinogen? NTP - No IARC - No OSHA - No

Medical conditions generally aggravated by exposure: none known.

Permissible Exposure Limits: None established by OSHA, ACGIH or H. Krevit & Company, Inc. As a minimum, H. Krevit & Company, Inc. Recommends controlling exposures such that irritation does not occur.

Acute:

Safe handling of this material on a long-term basis should emphasize minimizing repeated acute exposure.

Inhalation: Inhalation of mist or fumes can cause bronchial irritation, cough, difficult breathing, inflammation of the mouth, nausea, and in severe exposures, pulmonary edema. Material has odor of chlorine.

Eye/Skin: Liquefied contact can produce irritation of the skin with blistering and eczema. Direct contact with eyes may cause redness, pain and in the case of concentrated hypochlorite (15%), permanent damage.

Ingestion: Ingestion of a few ounces can cause corrosion of mucous membranes, swelling of the throat, perforation of the esophagus and stomach, vomiting, colitic hypotension and circulatory collapse. May lead to convulsions, coma or death. At 15% concentrations, as little as 1 ounce may be lethal.

Chronic: Carcinogenesis: The carcinogenic potential of sodium hypochlorite was studied in F344 rats. After 104 weeks of drinking water containing up to 2000 ppm sodium hypochlorite, there was no evidence that this chemical produced any carcinogenic response. In addition, this exposure did not result in any adverse effects in blood, clinical chemistry, or other target organs.

+ EMERGENCY AND FIRST AID PROCEDURES +

Inhalation: remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician.

Eye Or Skin Contact: flush eyes and skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If irritation occurs, consult a physician. Thoroughly clean clothing and shoes before reuse or discard.

Ingestion: If conscious: drink large quantities of water. Do not induce vomiting. Take immediately to a hospital or physician. If unconscious, or in convulsions: take immediately to a hospital do not give anything by mouth to an unconscious person.

NOTES TO PHYSICIAN (including antidotes): do not administer acidic antidotes or sodium bicarbonate following sodium hypochlorite overexposure. An ounce of 1% sodium thiosulfate or milk of magnesia is helpful.

***** 24-Hour Emergency Assistance: CHEMTREC (800) 424-9300 *****

05-22-99 11:54

ID=

P.05

SECTION 6 • REACTIVITY DATA

Stability: Stable Conditions to avoid: None

Hazardous polymerization: Will not occur Conditions to avoid: None

Incompatibility (materials to avoid): avoid mixing with acids (liberates chlorine), ammonia, urea, oxidizing materials, and metals such as nickel, copper, tin, manganese and iron (which cause liberation of oxygen).

Hazardous Decomposition Products: In a fire, sodium hypochlorite may decompose producing irritating chlorine gas and oxygen.

SECTION 7 • SPILL OR LEAK PROCEDURES

Steps to be Taken if Material is Spilled or Released: immediately evacuate the area and provide maximum ventilation. Unprotected personnel should move upwind of spill. Only personnel equipped with proper respiratory and skin/eye protection (see section 8) should be permitted in area. Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters.

Large Spills: recover spilled material on adsorbents, such as vermiculite, and sweep into closed containers for disposal. Do not use combustible adsorbents such as sawdust. After all visible traces have been removed, thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. As necessary and place in closed containers for disposal. Small spills (less than 10 gallons): can diluted with large quantities of water and then flushed to sanitary sewer.

Disposal Method: H. Krevit & Company, Inc. Recommends disposal in an approved hazardous waste management facility. Care must be taken when using or disposing of chemical materials and/or their containers to prevent environmental contamination. It is your duty to dispose of the chemical materials and/or their containers in accordance with all regulations regarding disposal.

SECTION 8 • SPECIAL PROTECTION INFORMATION

Respiratory Protection: use a half or full facepiece acid gas chemical cartridge respirator when exposures to sodium hypochlorite are likely. An appropriate particulate pre-filter is also required when mists are present. Similar protection should be worn while cleaning up spills or leaks if irritation occurs. Respirators must be approved by NIOSH or MSHA. The respirator use limitations made by NIOSH/MSHA and by the manufacturer must be observed.

Ventilation (type): use local or general ventilation to minimize employee exposures as necessary.

Eye Protection: Splash-proof chemical goggles

Gloves: Neoprene or Nitril gloves

Other Protective Equipment: use rubber/plastic boots, apron or chemical suits when necessary to prevent skin contact.

*** 24-Hour Emergency Assistance: CHEMTREC (800) 424-9300 ***

05-22-99 11:55

*** Hypochlorite Solution (M.S.D.S.) • H. Krevit & Company • Rev. 8/19/96 • page 5

SECTION 9 • SPECIAL PRECAUTIONS

Precautions to be Taken During Handling and Storing:

- When handling, wear gloves, safety goggles and respiratory protection.
- Store in a cool, dry, well-ventilated area.
- Avoid excessive storage temperatures and direct sunlight.
- Store away from acids and organics.
- Store only in closed, properly labeled containers.

Other Precautions:

- Avoid contact with eyes and skin. May cause burns to eyes and skin.
- Avoid inhalation of vapors, mists and fumes.
- Use with adequate ventilation. Ventilation must be sufficient to minimize employee exposure to sodium hypochlorite.
- Wash thoroughly after handling.
- Do not swallow.
- Do not eat, drink or smoke in work area.

Comments:

TSCA: Sodium hypochlorite is on the TSCA inventory under CAS #7681 52-9.

SDS Title III - a: 311/312 categories - acute and reactivity, b. Not listed in section 313, c. Not listed as an "extremely hazardous substance" in section 302.

CERCLA: Listed in table 302.4 of 40 CFR part 302 as a hazardous substance with a reportable quantity of 100 pounds. Releases to air, land or water which exceed the R.Q. must be reported to the national response center, 1-800-424-8802.

Canadian WHMIS: sensitization to product - none known, reproductive toxicity - none known, product use - bleaching paper pulp, textiles, water purification.

Buyer Read:

This information is taken from sources believed to be reliable and is offered in good faith. However, H. Krevit & Company makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions. In addition, Many of the products we sell can be extremely dangerous or fatal if they are not handled and used according to accepted industry standards. We have no control over the mis-use or mis-handling of any of our products once they leave our possession. Therefore H. Krevit & Company assumes no liability and is not responsible for the improper use, handling or storage of any products we sell. And, no warranty of any kind, expressed or implied, is made concerning the use of this product. User assumes all risk and liability from handling, use or application.

***** 24-Hour Emergency Assistance: CHEMTREC (800) 424-9300 *****



**PRECAUTIONARY STATEMENTS:
HAZARDS TO HUMANS AND
DOMESTIC ANIMALS**

DANGER:

IRITANT. May cause severe skin irritation (chemical burns to broken skin). Causes eye damage. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and heavy gloves when handling this product. Wash thoroughly with soap and water after use. Avoid breathing vapors. Keep away from children and pets. Do not return until odor has disappeared.

ENVIRONMENTAL HAZARDS:

Is a pesticide in toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, rivers, wetlands, oceans or public waters. Use only in accordance with the requirements of a National Pollution Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not charge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

PHYSICAL & CHEMICAL HAZARDS:

FLAMMABLE: Oxidizing Agent. May only with use according to label directions. Mixing a product with acids such as muriatic, nitric, or other chemicals may release a toxic gas irritating to eyes, lungs and other membranes.

UN-1791
C.A.S.# 7681-52-9

EPA REG. NO. 52485-1
EPA REG. NO. 52485-CT 001



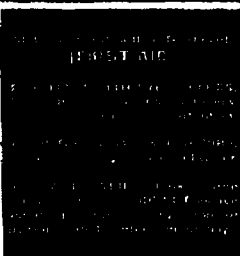
This product Certified by NSF
The maximum allowable dose is
250 mg/L (or 150 mg/L)

**HYPOCHLORITE
SOLUTION**

Active Ingredients:

Sodium Hypochlorite..... 12.50%
Inert Ingredients..... 87.50%
Total..... 100.00%

**KEEP OUT OF REACH
OF CHILDREN
DANGER**



Manufactured with pride and care by
H. Kroyt & Company, Inc.
P.O. Box 9433
New Haven, CT 06534-0433
Tel: 1-203-772-3350

See side panel
for additional precaution.

DIRECTIONS FOR USE: It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

SUMMERING POOL - WATER DISINFECTION
FOR A NEW POOL OR SPRING TREATMENT: Apply 1 1/2 gallons of this product for each ten thousand gallons of pool water to yield 5 to 10 ppm available chlorine by weight. (Test level of available chlorine with a test kit. Adjust and maintain water pH to between 7.2 and 7.6. Adjust and maintain the clarity of the pool to between 30 to 100 ppm.)

TO MAINTAIN THE POOL: Add weekly or by heater device 1 oz. of this product for each ten thousand gallons of pool water to yield an available chlorine residual between 0.5 and 1.0 ppm by weight. Retained pool shock treatment residual of 1.0 to 1.5 ppm available chlorine. Test the pH, available chlorine residual and clarity of the water frequently with the appropriate test kit. Frequency of water treatment will depend upon temperature and number of swimmers.

ENTER 7 DAYS: or in necessary, SUPERCHLORATE the pool with 1/2 gallon to 1 1/2 gallons of this product for each ten thousand gallons of pool water to yield 5 to 10 ppm available chlorine by weight. Check the level of available chlorine with a test kit. Do not re-enter the pool until the chlorine residual is between 1.0 and 1.5 ppm.

AT THE END OF THE SWIMMING POOL SEASON: or whenever water is to be drained from the pool, chlorine must be added to dissipate from the pool water before discharge. Do not chlorinate the pool within 24 hours prior to discharge.

MAINTAINING POOLS:

While water is still clear and clean, add 1.5 oz. of this product per one thousand gallons of pool water, while the filter is running, to obtain a 5 ppm available chlorine residual, as determined by a suitable test kit. Cover pool, prepare heater, filter and heater components for winter by following manufacturer's instructions.

USER PLEASE NOTE: This product degrades with age. Use a chlorine test kit and increase dosage as necessary to obtain the required level of available chlorine.

SPAS, HOT TUBS, SUPERHEATED TUBS, ETC.

SPAS/HOT TUBS: Apply 5 oz. of product per 1000 gallons of water to obtain a free available chlorine residual of 5 ppm, as determined by a suitable chlorine test kit. Adjust and maintain pool water pH to between 7.2 and 7.6. Some oils, lotions, fragrances, etc., may cause foaming or cloudy water as well as reduce the efficiency of the product.

DIRECTIONS FOR DISINFECTION OF POTABLE WATER

PUBLIC SYSTEMS: Mix a ratio of 1 oz. of this product to 100 gallons of water to begin treating this solution with a hypochlorinator until free available chlorine residual of at least 0.2 ppm and the water is clear. pH is adjusted throughout the chlorination system. Check water frequently with a chlorine test kit. Bacteriological sampling must be conducted at a frequency of no less than that prescribed by the National Sanitation Foundation for the Regulation of Potable Water. For further details.

DIRECTIONS FOR SANITIZING AND DEODORIZING FOOD PROCESSING, DAIRY FARM, HOT RESTAURANT AND TUBS, ETC.
SANITIZING METHOD: Prepare a sanitizing solution by thoroughly mixing 100 ppm of available chlorine with 10 gallons of water to provide hypochlorite solution. Use equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to dry. Do not reuse equipment in other treatment.

LAUNDRY SANITIZING:
Household Laundry Sanitizers: Thoroughly mix 2 oz. of water to provide 200 ppm available chlorine. Immerse laundry for at least 10 minutes.
COMMERCIAL LAUNDRY: Thoroughly mix 1 oz. of this product to 100 ppm of water containing cold chlorine. Wait 5 minutes then wash twice.

COMMERCIAL LAUNDRY: Thoroughly mix 1 oz. of this product to 100 ppm of water containing cold chlorine. Wait 5 minutes then wash twice.

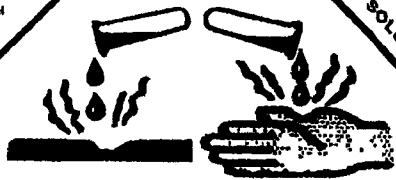
COMMERCIAL LAUNDRY: Thoroughly mix 1 oz. of this product to 100 ppm of water containing cold chlorine. Wait 5 minutes then wash twice.

WASHES AND WASTEWATER TREATMENT:

WASHES AND WASTEWATER TREATMENT: Apply a 1 oz. of this product to 100 ppm of water containing cold chlorine. Wait 5 minutes then wash twice.

STORAGE AND DISPOSAL: Store this product in a cool dry place, away from children. Do not use if the seal is broken. Do not mix with other chemicals. Do not mix with acids. Do not mix with other chemicals. Do not mix with acids.

NET CONTENTS:	
1 L GALS.	(40 lbs.)
1 L GALS.	(50 lbs.)
1 L GALS.	(150 lbs.)
1 L GALS.	(300 lbs.)
1 L GALS.	(550 lbs.)



CORROSIVE

8

05-22-99 11:56

ID=

P.08

H. Krevit & Co., Inc.
Superior Chemicals for Industry Since 1919

(203) 772-3350 Fax# (203) 776-0730
73 Welton Street P.O. Box 9433 New Haven, CT. 06534-0433

SODIUM HYPOCHLORITE SOLUTION**CERTIFICATE OF ANALYSIS**

DATE : 07/06/98
CUSTOMER: NEW YORK CITY HOUSING
REFERENCE/BILL OF LADING NO: 98199
CUSTOMER PURCHASE ORDER NO: D070205
H. KREVIT & CO. LOT NO: 8701191
TRUCK/TRAILER NO: 41

MANUFACTURING SPECIFICATION RANGE:	MINIMUM	TARGET	MAXIMUM
% HYPOCHLORITE SOLUTION (NaOCL)	12.50	12.78	13.06
% AVAILABLE CHLORINE (TRADE %)	14.24	14.62	15.00
% EXCESS ALKALINITY (NAOH)	0.04	0.82	1.67

MAXIMUM DOSE ALLOWED IN POTABLE WATER 250 mg/L

ANALYSIS

SPECIFIC GRAVITY: 1.200
% HYPOCHLORITE SOLUTION (NaOCL) : 12.56
% AVAILABLE CHLORINE gr/1/10 (=trade %): 14.57
% AVAILABLE CHLORINE, BY WEIGHT % (=trade % /sg) 12.16
% EXCESS ALKALINITY (NAOH) .77
PH : 11.2

LABORATORY TECHNICIAN : DONALD DECHELLO JR.
PLEASE CALL IF YOU HAVE ANY QUESTIONS.

THANK YOU,

SINCERELY, DONALD DECHELLO, VICE PRESIDENT OF OPERATIONS



**GSA SAFETY, ENVIRONMENT AND FIRE
PROTECTION BRANCH (WPYG)**

ROB, ROOM 2080
7TH & D STREETS, SW
WASHINGTON, DC 20407

PHONE: (202) 708-5253 FAX: (202) 708-6618

FACSIMILE TRANSMITTAL SHEET

TO:

Jim Dolan

FROM:

James Hodges

DATE:

03/10/00

FAX NUMBER:

PHONE NUMBER

TOTAL NO. OF PAGES INCLUDING COVER:

703-648-0575

2

RE:

Bldg. 74 & 202 IAQ Follow-up Info

☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☒ PLEASE RECYCLE

NOTES/COMMENTS:



Steven P. Richard
03/10/2000 11:18 AM

To: James G. Hodges/CONTRACTOR/WPY/RW/GSA/GOV@GSA, James T.
Sleeth/WPY/RW/GSA/GOV@GSA, Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA
cc:

Subject: Re: IAQ Survey


According to Ms Wise this is March and Applied can schedule their follow up IAQ survey for 74 and 202.

----- Forwarded by Steven P. Richard/WPY/RW/GSA/GOV on 03/10/2000 11:16 AM -----



AM

To: Steven P. Richard/WPY/RW/GSA/GOV@GSA
cc:

Subject: Re: IAQ Survey 

Your information that you received from James Dolan is NOT true. He called me on February 28, 2000 asking when he could do a follow up on the air sampling testing for buildings 74 and 202. I indicated to him that he could start next month which would be March 2000 and April 2000. If any one count and knows their months, March comes after February not April. In the future, please be sure that your information is accurate.

2/29/2000: Inspection by Charles E. Smith
3/6/2000: Status Update

Test positive results and inspection comments per Applied Environmental (AE) testing:

Room 9181-Ninth floor conference room:

- clean*
1. There was no evidence of new water damage. The ceiling, window mullions, and dry wall repairs have been completed.
 2. The drapes have been dry cleaned ~~and rehung~~ *bag & cleaned*
 3. The room will be cleaned, with the drapes, ~~chairs,~~ *bag & cleaned* and carpet removed, with immediate follow up testing.
 4. The Environmental Group will remove the carpet. Waiting for coordination with AE testing during same evening carpet is removed. New carpet on order, 2 weeks (from 3/6/00) until carpet available. *bag, discards*
 5. The conference room chairs are high backed with numerous deep buttons and are very dirty. The chairs will be cleaned and replaced after the testing. *FRI/SAT 6-7pm 8-9pm (P.M.W.)*
 6. One window in the conference room will need to be replaced due to the calcium deposit inside the double pane window. Waiting on new window, approximately 3 weeks from 3/6/00. *SUN AM > Applied*

Room 9182

- clean*
1. New carpet was installed. No evidence of new water leaks.
 2. The room will be cleaned with immediate follow up testing. Waiting for coordination with AE testing during the same evening following cleaning.
 3. One ceiling tile to be replaced 3/7/00. *(Replaced)*

Room 9112

- clean*
1. No evidence of new water leaks.
 2. The room will be cleaned with immediate follow up testing. Waiting for coordination with AE testing during the same evening following cleaning.

Room 9180

- clean*
1. No evidence of new water leaks.
 2. The room will be cleaned with immediate follow up testing. Waiting for coordination with AE testing during the same evening following cleaning.

Room 9110

- clean*
1. No evidence of new water leaks.
 2. The room will be cleaned with immediate follow up testing. Waiting for coordination with AE testing during the same evening following cleaning.

Room 9180A

- clean*
1. No evidence of new water leaks.
 2. The room will be cleaned with immediate follow up testing. Waiting for coordination with AE testing during the same evening following cleaning.

MAY DO WALL penetrations

will DO desk testing

Note: Applied to test on a Sun. will take 3 hrs to do

*JIM Dolan cell 703 926 3465
H 264 9640*

clean
see
(1 p/s)

H2O damage observed

Room 9201A

1. Water stained ceiling tile and dry wall damage under the window mullion. Water stained ceiling tile likely occurred during roof replacement. The damaged tiles have been replaced. *(replaced)*
2. Damaged drywall will be replaced. As a precaution, we will check the exterior caulking during the week of 3/7/00.
3. The room will be cleaned with immediate follow up testing. Waiting for coordination with AE testing during the same evening following cleaning.

For test (1 p/s)

First floor: Karen Brown's office

- Sprinklers came on inside & had H2O intrusion under raised floor*
will for clean
1. The entire area is in excellent condition. The area will be cleaned and retested.

Return air shaft:

1. Area will be sprayed with fungicide. Waiting for coordination with AE testing during the same evening following cleaning.

Applied - need clarifications for return sample loca.
Other Remaining Construction Items

Room 9173

1. All construction items completed except:
 - Window bookcase - installed in office, cabinet handles to be installed 3/7/00
 - Carpet to be cleaned 3/7/00, new carpet on order, timing 2 weeks from 3/7/00.
 - DISA request: Clean exterior windows, interior watermarks cleaned will have contractor do exterior.
 - DISA request: Install additional 8' of oak wood base, wood base not originally in office, item has no relation to current issue.

Room 9199

1. Mr. Miller's temporary office, badly stained drapes from roofing tar during roof replacement. Drapes will be replaced, timing 2-3 weeks for new drapes from 3/7/00.
2. DISA request: office contains vinyl wall covering to be removed and wall painted. Per DISA, the work is on hold until Mr. Miller moves back into original office.

9131 - repl. H2O damage CT

(1 p/s) 9143 - A. niger detected. CE will ✓

9121 - test plenum (air) above ceiling

(9)
(#) Areas

Patricia L. Gretskey

03/08/2000 09:27 AM

To: LHung@foh.dhhs.gov
cc:

Subject: S. atra- Skyline V

So sorry to put you on notice for yesterday morning's meeting and not place the phone call. We were on track with the hysteria associated with the 60 minutes episode. Luckily I was able to get a copy of the write up and helped diffuse the issue by educating the 9th floor occupants.

Some additional information that I was able to get for you- The diagram I sent up includes a finding in Rm. 9134 (conference room in upper left corner). There was no *S. atra* or *A. niger* identified in this area.

Areas affected by water leaks include the following rooms:
Room 9131, 9173-9193, 9199, 9121, 9113-9189

20 occupants have been to the DOD clinic. Of those, only 2 were informed they should not be in their offices for health reasons. Those are the occupants in Rooms 9173 and 9139 (it doesn't appear she is in an area that has water damage nor where *S. atra* was detected).

AHU #2 supplies the right half of the floor. The floor's return for the unit is in the core where the big X is (the X is the air shaft. The little room on the bottom left marked "EWC" is the return diffuser.

The wall where visible growth has been observed is in the common wall between rooms 9181 and 9182. The wall consists only of 2 drywall walls with metal studs between them (no insulation material).

The return for the floor is an open ceiling plenum to the EWC room (2 on each floor).

The lessor has completed the inspection work and is planning on cleaning the 7 rooms this weekend. Follow-up sampling will be performed on Sunday. They are using a phenolic solution to clean with. They are also going to "bomb" disinfect the return system. I am requested but have not yet received the MSDS sheets for the materials they are using.

The unidentified mold indicated in the tables was identified as *heteroconium*.

- Intercomunic



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ROB, ROOM 2080
7TH & D STREETS, SW
WASHINGTON, DC 20407

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FACSIMILE TRANSMITTAL SHEET

TO:

Peter Gilson

FROM:

Trish Gretskey

DATE:

02/24/00

FAX NUMBER:

PHONE NUMBER

TOTAL NO. OF PAGES INCLUDING COVER:

703-693-7810

26

Skyline 5 IAQ Tables

☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☒ PLEASE RECYCLE

NOTES/COMMENTS:

18 workers

15-100 workers at nearby hotel



GENERAL SERVICES ADMINISTRATION

Microbial Sampling Results

Skyline V Building
5111 Leesburg Pike
Falls Church, Virginia

Sample Location	Sample Type	Result	Organisms Isolated
JASD000131-1 Ninth floor, conference room	Air, Total Fungal Count w/ lds	24 cfu/m ³	Rhizopus species (50%) Cladosporium species (50%)
JASD000131-1 Ninth floor, conference room	Air, Stachybotrys Culture	24 cfu/m ³	Stachybotrys chartarum (atra) (50%) [REDACTED]
JASD000131-1 Ninth floor, conference room	Non-viable, Spore Trap Analysis	Total spores = 66	Cladosporium (11) Basidiospores (11) Unknown (44)
JASD000131-2 Ninth Floor, Room 9182	Air, Total Fungal Count w/ lds	36 cfu/m ³	Penicillium species (50%) [REDACTED]
JASD000131-2 Ninth Floor, Room 9182	Air, Stachybotrys Culture	30 cfu/m ³	Stachybotrys chartarum (atra) (40%) Penicillium species (40%)
JASD000131-2 Ninth Floor, Room 9182	Non-viable, Spore Trap Analysis	Total spores = 77	Ascospores (11) Smuts, Periconia, Myxomycetes (11) Unknown (44) Hyphal Elements (11)
JASD000131-3 Ninth floor, Room 9113	Air, Total Fungal Count w/ lds	No Growth	N/A
JASD000131-3 Ninth floor, Room 9113	Air, Stachybotrys Culture	24 cfu/m ³	Penicillium species (50%) Yeast (25%)
JASD000131-3 Ninth floor, Room 9113	Non-viable, Spore Trap Analysis	Total spores = 11	Unknown (11)
JASD000131-4 Ninth floor, Room 9112	Air, Total Fungal Count w/ lds	18 cfu/m ³	Penicillium species (33%) Cladosporium species (33%)
JASD000131-4 Ninth floor, Room 9112	Air, Stachybotrys Culture	18 cfu/m ³	Penicillium species (67%) Cladosporium species (33%)
JASD000131-4 Ninth floor, Room 9112	Non-viable, Spore Trap Analysis	Total spores = 66	Ascospores (22) Smuts, Periconia, Myxomycetes (11) Stachybotrys (22) Epitocum (11)
JASD000131-5 Ninth floor, office at north end of corridor from conference room	Air, Total Fungal Count w/ lds	6 cfu/m ³	Cladosporium species (100%)

Sample Location	Sample Type	Result	Organisms Isolated
JASD000131-3 Ninth floor, office at north end of corridor from conference room	Air, Stachybotrys Culture	18 cfu/m ³	Yeast (67%) Cladosporium species (33%)
JASD000131-5 Ninth floor, office at north end of corridor from conference room	Non-viable, Spore Trap Analysis	Total spores = 44	Cladosporium (11) Smuts, Periconia, Myxomycetes (11) Penicillium/Aspergillus group (11) Pestalotia (11)
JASD000131-6 Outside	Air, Total Fungal Count w/ lds	66 cfu/m ³	Cladosporium species (27%) Penicillium species (18%)
JASD000131-6 Outside	Air, Stachybotrys Culture	66 cfu/m ³	Sterilia mycelia (45%) Penicillium species (18%)
JASD000131-6 Outside	Non-viable, Spore Trap Analysis	Total spores = 330	Smuts, Periconia, Myxomycetes (22) Penicillium/Aspergillus group (11) Pollen grains (22) Unknown (253) Hyphal elements (22)
JASD000131-7 Blank	Air, Total Fungal Count w/ lds	No Growth	N/A
JASD000131-7 Blank	Air, Stachybotrys Culture	No Growth	N/A
JASK000201-1 Ninth floor, Room 9180	Air, Total Fungal Count w/ lds	14 cfu/m ³	Penicillium species (50%)
JASK000201-1 Ninth floor, Room 9180	Air, Stachybotrys culture	7 cfu/m ³	Stachybotrys chartarum (atra) (100%)
JASK000201-2 Ninth floor, Room 9114	Air, Total Fungal Count w/ lds	21 cfu/m ³	Cladosporium species (34%) Phoma species (33%) Sterilia mycelia (33%)
JASK000201-2 Ninth floor, Room 9114	Air, Stachybotrys culture	42 cfu/m ³	Cladosporium species (33%) Drechslera species (17%) Penicillium species (17%) Phoma species (17%) Acremonium (Cephalosporium) species (16%)
JASK000201-3 Ninth floor, Room 9115	Air, Total Fungal Count w/ lds	7 cfu/m ³	Aspergillus ochraceous (100%)
JASK000201-3 Ninth floor, Room 9115	Air, Stachybotrys culture	No Growth	N/A
JASK000201-4 Ninth floor, Room 9111	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000201-4 Ninth floor, Room 9111	Air, Stachybotrys culture	No Growth	N/A

Sample ID	Sample Type	Result	Organism(s) Isolated
JASK000201-5 Ninth floor, Room 9116	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Penicillium species (100%)
JASK000201-5 Ninth floor, Room 9116	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (100%)
JASK000201-6 Ninth floor, Room 9110	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-6 Ninth floor, Room 9110	Air, Stachybotrys culture	7 cfu/m ³	Stachybotrys chartarum (atra) (100%)
JASK000201-7 Ninth floor, Room 9117	Air, Total Fungal Count w/ Ids	35 cfu/m ³	Penicillium species (40%) Aspergillus species (20%) Scopulariopsis candidus (20%) Sterilia mycelia (20%)
JASK000201-7 Ninth floor, Room 9117	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000201-8 Ninth floor, Room 9109	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Cladosporium species (100%)
JASK000201-8 Ninth floor, Room 9109	Air, Stachybotrys culture	7 cfu/m ³	Aspergillus species (100%)
JASK000201-9 Ninth floor, Room 9118	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-9 Ninth floor, Room 9118	Air, Stachybotrys culture	No Growth	N/A
JASK000201-10 Ninth floor, Room 9117A	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-10 Ninth floor, Room 9117A	Air, Stachybotrys culture	No Growth	N/A
JASK000201-11 Ninth floor, Room 9108A	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-11 Ninth floor, Room 9108A	Air, Stachybotrys culture	14 cfu/m ³	Alternaria species (50%) Sterilia mycelia (50%)
JASK000201-12 Ninth floor, Room 9107	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aspergillus ochraceous (100%)
JASK000201-12 Ninth floor, Room 9107	Air, Stachybotrys culture	No Growth	N/A

Sample Location	Sample Type	Result	Organisms Isolated
JASK000201-13 Ninth floor, Room 9180A	Air, Total Fungal Count w/ lds	21 cfu/m ³	Sterilia mycelia (66%) Aspergillus ochraceous (34%)
JASK000201-13 Ninth floor, Room 9180A	Air, Stachybotrys culture	28 cfu/m ³	Stachybotrys chartarum (atra) (75%) Penicillium species (25%)
JASK000201-14 Ninth floor, Room 9179	Air, Total Fungal Count w/ lds	35 cfu/m ³	Penicillium species (60%) Cladosporium species (40%)
JASK000201-14 Ninth floor, Room 9179	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000201-15 Ninth floor, Room 9183	Air, Total Fungal Count w/ lds	7 cfu/m ³	Fungus isolated, ID to follow (100%)
JASK000201-15 Ninth floor, Room 9183	Air, Stachybotrys culture	14 cfu/m ³	Cladosporium species (50%) Penicillium species (50%)
JASK000201-16 Ninth floor, Room 9186	Air, Total Fungal Count w/ lds	21 cfu/m ³	Aureobasidium species (34%) Streptomyces species (33%) Fungus isolated, ID to follow (33%)
JASK000201-16 Ninth floor, Room 9186	Air, Stachybotrys culture	No Growth	N/A
JASK000201-17 Ninth floor, Room 9187A	Air, Total Fungal Count w/ lds	14 cfu/m ³	Penicillium species (100%)
JASK000201-17 Ninth floor, Room 9187A	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000201-18 Ninth floor, Room 9178	Air, Total Fungal Count w/ lds	7 cfu/m ³	Cladosporium species (100%)
JASK000201-18 Ninth floor, Room 9178	Air, Stachybotrys culture	7 cfu/m ³	Streptomyces species (100%)
JASK000201-19 Ninth floor, Room 9177	Air, Total Fungal Count w/ lds	14 cfu/m ³	Arthrinium species (50%) Penicillium species (50%)
JASK000201-19 Ninth floor, Room 9177	Air, Stachybotrys culture	No Growth	N/A
JASK000201-20 Ninth floor, Room 9178B	Air, Total Fungal Count w/ lds	14 cfu/m ³	Fungus isolated, ID to follow (50%) Verticillium species (50%)
JASK000201-20 Ninth floor, Room 9178B	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000201-21 Ninth floor, Room 9188	Air, Total Fungal Count w/ lds	21 cfu/m ³	Verticillium species (34%) Sterilia mycelia (33%) Fungus isolated, ID to follow (33%)

Sample Location	Sample Type	Result	Organisms Isolated
JASK000201-21 Ninth floor, Room 9188	Air, Stachybotrys culture	No Growth	N/A
JASK000201-22 Ninth floor, Room 9176	Air, Total Fungal Count w/ lds	7 cfu/m ³	Fungus isolated, ID to follow
JASK000201-22 Ninth floor, Room 9176	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000201-23 Ninth floor, Room 9189	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000201-23 Ninth floor, Room 9189	Air, Stachybotrys culture	No Growth	N/A
JASK000201-24 Ninth floor, Room 9175	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000201-24 Ninth floor, Room 9175	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Aspergillus species (50%)
JASK000201-25 Ninth floor, Room 9106	Air, Total Fungal Count w/ lds	7 cfu/m ³	Aspergillus species (100%)
JASK000201-25 Ninth floor, Room 9106	Air, Stachybotrys culture	No Growth	N/A
JASK000201-26 Ninth floor, Room 9103	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000201-26 Ninth floor, Room 9103	Air, Stachybotrys culture	7 cfu/m ³	Streptomyces species (100%)
JASK000201-27 Ninth floor, Room 9104	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000201-27 Ninth floor, Room 9104	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000201-28 Outside	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000201-28 Outside	Air, Stachybotrys culture	14 cfu/m ³	Cladosporium species (100%)
JASK000201-29 Ninth floor, Room 9105	Air, Total Fungal Count w/ lds	7 cfu/m ³	Penicillium species (100%)
JASK000201-29 Ninth floor, Room 9105	Air, Stachybotrys culture	No Growth	N/A

Sample Location	Sample Type	Result	Organisms Isolated
JASK000201-30 Ninth floor, Room 9102	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Streptomyces species (100%)
JASK000201-30 Ninth floor, Room 9102	Air, Stachybotrys culture	7 cfu/m ³	Streptomyces species (100%)
JASK000201-31 Ninth floor, Room 9190	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)
JASK000201-31 Ninth floor, Room 9190	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000201-32 Ninth floor, Room 9192	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Sterilia mycelia (50%) Fungus isolated, ID to follow (50%)
JASK000201-32 Ninth floor, Room 9192	Air, Stachybotrys culture	No Growth	N/A
JASK000201-33 Ninth floor, Room 9174	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Cladosporium species (100%)
JASK000201-33 Ninth floor, Room 9174	Air, Stachybotrys culture	No Growth	N/A
JASK000201-34 Ninth floor, Room 9191	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Aspergillus species (50%) Black yeast (50%)
JASK000201-34 Ninth floor, Room 9191	Air, Stachybotrys culture	No Growth	N/A
JASK000201-35 Ninth floor, Room 9193	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Fungus isolated, ID to follow (100%)
JASK000201-35 Ninth floor, Room 9193	Air, Stachybotrys culture	No Growth	N/A
JASK000201-36 Ninth floor, Room 9194	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-36 Ninth floor, Room 9194	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000201-37 Ninth floor, Room 9101	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000201-37 Ninth floor, Room 9101	Air, Stachybotrys culture	7 cfu/m ³	Alternaria species (100%)
JASK000202-1 Ninth floor, Room 9100	Air, Total Fungal Count w/ Ids	No Growth	N/A

Sample Location	Sample Type	Result	Organisms Isolated
JASK000202-1 Ninth floor, Room 9100	Air, Stachybotrys culture	No Growth	N/A
JASK000202-2 Ninth floor, Room 9099	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-2 Ninth floor, Room 9099	Air, Stachybotrys culture	No Growth	N/A
JASK000202-3 Ninth floor, Room 9098	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-3 Ninth floor, Room 9098	Air, Stachybotrys culture	No Growth	N/A
JASK000202-4 Ninth floor, Room 9094	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-4 Ninth floor, Room 9094	Air, Stachybotrys culture	No Growth	N/A
JASK000202-5 Ninth floor, Room 9095	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-5 Ninth floor, Room 9095	Air, Stachybotrys culture	No Growth	N/A
JASK000202-6 Ninth floor, Room 9097	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-6 Ninth floor, Room 9097	Air, Stachybotrys culture	No Growth	N/A
JASK000202-7 Ninth floor, Room 9096	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Streptomyces species (100%)
JASK000202-7 Ninth floor, Room 9096	Air, Stachybotrys culture	No Growth	N/A
JASK000202-8 Ninth floor, Room 9093	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-8 Ninth floor, Room 9093	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000202-9 Ninth floor, Room 9119	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-9 Ninth floor, Room 9119	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)

Sample Location	Sample Type	Result	Organisms Isolated
JASK000202-10 Ninth floor, Room 9121	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000202-10 Ninth floor, Room 9121	Air, Stachybotrys culture	14 cfu/m ³	Aspergillus species (50%) Sterilia mycelia (50%)
JASK000202-11 Ninth floor, Room 9120	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-11 Ninth floor, Room 9120	Air, Stachybotrys culture	No Growth	N/A
JASK000202-12 Ninth floor, Room 9122	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-12 Ninth floor, Room 9122	Air, Stachybotrys culture	7 cfu/m ³	Cladosporium species (100%)
JASK000202-13 Ninth floor, Room 9124	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-13 Ninth floor, Room 9124	Air, Stachybotrys culture	No Growth	N/A
JASK000202-14 Ninth floor, Room 9127	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Paecilomyces inflatus (100%)
JASK000202-14 Ninth floor, Room 9127	Air, Stachybotrys culture	No Growth	N/A
JASK000202-15 Ninth floor, Room 9128	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-15 Ninth floor, Room 9128	Air, Stachybotrys culture	No Growth	N/A
JASK000202-16 Outside	Air, Total Fungal Count w/ Ids	28 cfu/m ³	Sterilia mycelia (100%)
JASK000202-16 Outside	Air, Stachybotrys culture	21 cfu/m ³	Sterilia mycelia (34%) Cladosporium species (33%) Yeast (33%)
JASK000202-17 Ninth floor, Room 9131	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-17 Ninth floor, Room 9131	Air, Stachybotrys culture	No Growth	N/A
JASK000202-18 Ninth floor, Room 9126	Air, Total Fungal Count w/ Ids	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000202-18 Ninth floor, Room 9126	Air, Stachybotrys culture	No Growth	N/A
JASK000202-19 Ninth floor, Room 9123	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-19 Ninth floor, Room 9123	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000202-20 Ninth floor, Room 9136A	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-20 Ninth floor, Room 9136A	Air, Stachybotrys culture	No Growth	N/A
JASK000202-21 Ninth floor, Room 9130	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-21 Ninth floor, Room 9130	Air, Stachybotrys culture	No Growth	N/A
JASK000202-22 Ninth floor, Room 9195	Air, Total Fungal Count w/ Ids	Quantitation not possible.	Confluent growth of Trichoderma species noted.
JASK000202-22 Ninth floor, Room 9195	Air, Stachybotrys culture	7 cfu/m ³	Cladosporium species (100%)
JASK000202-23 Ninth floor, Room 9196	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Fungus isolated, ID to follow (100%)
JASK000202-23 Ninth floor, Room 9196	Air, Stachybotrys culture	7 cfu/m ³	Fungus isolated, ID to follow (100%)
JASK000202-24 Ninth floor, Room 9197	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-24 Ninth floor, Room 9197	Air, Stachybotrys culture	No Growth	N/A
JASK000202-25 Ninth floor, Room 9198	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Paecilomyces species (100%)
JASK000202-25 Ninth floor, Room 9198	Air, Stachybotrys culture	14 cfu/m ³	Aspergillus species (50%) Sterilia mycelia (50%)
JASK000202-26 Ninth floor, Room 9199	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-26 Ninth floor, Room 9199	Air, Stachybotrys culture	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000202-27 Ninth floor, Room 9201	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aspergillus species (100%)
JASK000202-27 Ninth floor, Room 9201	Air, Stachybotrys culture	7 cfu/m ³	Stachybotrys chartarum (atra) (100%)
JASK000202-28 Ninth floor, Room 9201A	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Cladosporium species (34%) Yeast (33%) Sterilia mycelia (33%)
JASK000202-28 Ninth floor, Room 9201A	Air, Stachybotrys culture	7 cfu/m ³	Sterilia mycelia (100%)
JASK000202-29 Ninth floor, Room 9202	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-29 Ninth floor, Room 9202	Air, Stachybotrys culture	7 cfu/m ³	Yeast (100%)
JASK000202-30 Ninth floor, Room 9203	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Cladosporium species (50%) Sterilia mycelia (50%)
JASK000202-30 Ninth floor, Room 9203	Air, Stachybotrys culture	No Growth	N/A
JASK000202-31 Ninth floor, Room 9204	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Alternaria species (50%) Aspergillus ochraceous (50%)
JASK000202-31 Ninth floor, Room 9204	Air, Stachybotrys culture	No Growth	N/A
JASK000202-32 Ninth floor, Room 9205	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-32 Ninth floor, Room 9205	Air, Stachybotrys culture	No Growth	N/A
JASK000202-33 Ninth floor, Room 9206	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Cladosporium species (34%) Aspergillus species (33%) Fungus isolated. ID to follow (33%)
JASK000202-33 Ninth floor, Room 9206	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000202-34 Ninth floor, Room 9207	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Aureobasidium species (100%)
JASK000202-34 Ninth floor, Room 9207	Air, Stachybotrys culture	No Growth	N/A
JASK000202-35 Ninth floor, Room 9208	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)

Sample ID	Sample Type	Result	Organism Isolated
JASK000202-35 Ninth floor, Room 9208	Air, Stachybotrys culture	7 cfu/m ³	Paecilomyces species (100%)
JASK000202-36 Ninth floor, Room 9209	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-36 Ninth floor, Room 9209	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (100%)
JASK000202-37 Ninth floor, Room 9173	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-37 Ninth floor, Room 9173	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (100%)
JASK000202-38 Ninth floor, Room 9169	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000202-38 Ninth floor, Room 9169	Air, Stachybotrys culture	7 cfu/m ³	Cladosporium species (100%)
JASK000202-39 Ninth floor, Room 9170	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000202-39 Ninth floor, Room 9170	Air, Stachybotrys culture	No Growth	N/A
JASK000203-1 Ninth floor, Room 9129	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Chrysosporium species (100%)
JASK000203-1 Ninth floor, Room 9129	Air, Stachybotrys culture	14 cfu/m ³	Aspergillus species (50%) Sterilia mycelia (50%)
JASK000203-2 Ninth floor, Room 9132	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Chrysosporium species (100%)
JASK000203-2 Ninth floor, Room 9132	Air, Stachybotrys culture	No Growth	N/A
JASK000203-3 Ninth floor, Room 9133	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000203-3 Ninth floor, Room 9133	Air, Stachybotrys culture	14 cfu/m ³	Botrytis species (50%) Sterilia mycelia (50%)
JASK000203-4 Ninth floor, Room 9134	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Botrytis (100%)
JASK000203-4 Ninth floor, Room 9134	Air, Stachybotrys culture	No Growth	N/A

Sample Location	Sample Type	Result	Organisms Isolated
JASK000203-5 Ninth floor, Room 9135	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-5 Ninth floor, Room 9135	Air, Stachybotrys culture	7 cfu/m ³	Paecilomyces inflatus (100%)
JASK000203-6 Ninth floor, Room 9136B	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000203-6 Ninth floor, Room 9136B	Air, Stachybotrys culture	No Growth	N/A
JASK000203-7 Ninth floor, Room 9136	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Cladosporium species (50%) Sterilia mycelia (50%)
JASK000203-7 Ninth floor, Room 9136	Air, Stachybotrys culture	15 cfu/m ³	Aspergillus species (100%)
JASK000203-8 Ninth floor, Room 9137	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Botrytis species (100%)
JASK000203-8 Ninth floor, Room 9137	Air, Stachybotrys culture	7 cfu/m ³	Cladosporium species (100%)
JASK000203-9 Ninth floor, Room 9136C	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Aspergillus species (66%) Sterilia mycelia (34%)
JASK000203-9 Ninth floor, Room 9136C	Air, Stachybotrys culture	21 cfu/m ³	Aspergillus species (34%) Paecilomyces inflatus (33%) Sterilia mycelia (33%)
JASK000203-10 Ninth floor, Room 9138	Air, Total Fungal Count w/ Ids	42 cfu/m ³	Penicillium species (67%) Aspergillus species (17%) Paecilomyces species (16%)
JASK000203-10 Ninth floor, Room 9138	Air, Stachybotrys culture	No Growth	N/A
JASK000203-11 Ninth floor, Room 9139	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-11 Ninth floor, Room 9139	Air, Stachybotrys culture	No Growth	N/A
JASK000203-12 Ninth floor, Room 9140	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Penicillium species (66%) Paecilomyces species (34%)
JASK000203-12 Ninth floor, Room 9140	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (100%)
JASK000203-13 Ninth floor, Room 9141	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Penicillium species (50%) Aspergillus species (50%)

Sample Location	Sample Type	Result	Organisms (%)
JASK000203-13 Ninth floor, Room 9141	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Streptomyces species (50%)
JASK000203-14 Ninth floor, Room 9142	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Aspergillus species (50%) Sterilia mycelia (50%)
JASK000203-14 Ninth floor, Room 9142	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000203-15 Ninth floor, Room 9143	Air, Total Fungal Count w/ Ids	21 cfu/m ³	Cladosporium species (34%) Aspergillus species (33%) Penicillium species (33%)
JASK000203-15 Ninth floor, Room 9143	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Aspergillus species (50%)
JASK000203-16 Ninth floor, Room 9144	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Penicillium species (100%)
JASK000203-16 Ninth floor, Room 9144	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Cladosporium species (50%)
JASK000203-17 Ninth floor, Room 9145	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)
JASK000203-17 Ninth floor, Room 9145	Air, Stachybotrys culture	7 cfu/m ³	Paecilomyces species (100%)
JASK000203-18 Ninth floor, Room 9147	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Sterilia mycelia (100%)
JASK000203-18 Ninth floor, Room 9147	Air, Stachybotrys culture	No Growth	N/A
JASK000203-19 Ninth floor, Room 9167	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-19 Ninth floor, Room 9167	Air, Stachybotrys culture	1 cfu/m ³	Sterilia mycelia (100%)
JASK000203-20 Ninth floor, Room 9171	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-20 Ninth floor, Room 9171	Air, Stachybotrys culture	No Growth	N/A
JASK000203-21 Ninth floor, Room 9172	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Penicillium species (100%)
JASK000203-21 Ninth floor, Room 9172	Air, Stachybotrys culture	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000203-22 Ninth floor, Room 9158	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Fungus isolated, ID to follow (100%)
JASK000203-22 Ninth floor, Room 9158	Air, Stachybotrys culture	No Growth	N/A
JASK000203-23 Ninth floor, Room 9165	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-23 Ninth floor, Room 9165	Air, Stachybotrys culture	No Growth	N/A
JASK000203-24 Ninth floor, Room 9157	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-24 Ninth floor, Room 9157	Air, Stachybotrys culture	1 cfu/m ³	Sterilia mycelia (100%)
JASK000203-25 Ninth floor, Room 9164	Air, Total Fungal Count w/ Ids	7 cfu/m ³	Botrytis species (100%)
JASK000203-25 Ninth floor, Room 9164	Air, Stachybotrys culture	No Growth	N/A
JASK000203-26 Ninth floor, Room 9163	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-26 Ninth floor, Room 9163	Air, Stachybotrys culture	No Growth	N/A
JASK000203-27 Ninth floor, Room 9162	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-27 Ninth floor, Room 9162	Air, Stachybotrys culture	No Growth	N/A
JASK000203-28 Ninth floor, Room 9156	Air, Total Fungal Count w/ Ids	No Growth	N/A
JASK000203-28 Ninth floor, Room 9156	Air, Stachybotrys culture	No Growth	N/A
JASK000203-29 Outside air, roof	Air, Total Fungal Count w/ Ids	14 cfu/m ³	Aspergillus species (100%)
JASK000203-29 Outside air, roof	Air, Stachybotrys culture	91 cfu/m ³	Penicillium species (38%) Aspergillus species (31%) Phoma species (8%) Paecilomyces species (8%) Cladosporium species (8%)

Sampling Location	Sample Type	Results	Organisms Isolated
JASK000203-30 Ninth floor, Room 9152	Air, Total Fungal Count w/ lds	7 cfu/m ³	Fungus isolated, ID to follow (100%)
JASK000203-30 Ninth floor, Room 9152	Air, Stachybotrys culture	35 cfu/m ³	Penicillium species (100%)
JASK000203-31 Ninth floor, Room 9154	Air, Total Fungal Count w/ lds	7 cfu/m ³	Cladosporium species (100%)
JASK000203-31 Ninth floor, Room 9154	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Alternaria species (50%)
JASK000203-32 Ninth floor, Room 9151	Air, Total Fungal Count w/ lds	21 cfu/m ³	Penicillium species (67%) Paecilomyces species (33%)
JASK000203-32 Ninth floor, Room 9151	Air, Stachybotrys culture	7 cfu/m ³	Aspergillus species (100%)
JASK000203-33 Ninth floor, Room 9150	Air, Total Fungal Count w/ lds	21 cfu/m ³	Penicillium species (67%) Sterilia mycelia (33%)
JASK000203-33 Ninth floor, Room 9150	Air, Stachybotrys culture	14 cfu/m ³	Sterilia mycelia (100%)
JASK000203-34 Ninth floor, Room 9148	Air, Total Fungal Count w/ lds	21 cfu/m ³	Streptomyces species (67%) Sterilia mycelia (33%)
JASK000203-34 Ninth floor, Room 9148	Air, Stachybotrys culture	14 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000203-35 Ninth floor, Room 9149	Air, Total Fungal Count w/ lds	21 cfu/m ³	Sterilia mycelia (100%)
JASK000203-35 Ninth floor, Room 9149	Air, Stachybotrys culture	No Growth	N/A
JASK000203-36 Ninth floor, Room 9146	Air, Total Fungal Count w/ lds	7 cfu/m ³	Penicillium species (100%)
JASK000203-36 Ninth floor, Room 9146	Air, Stachybotrys culture	7 cfu/m ³	Penicillium species (100%)
JASK000203-37 Ninth floor, Room 9173, beneath wallpaper, west window	Wipe, Total Fungal Count w/ lds	20 cfu/in ²	Penicillium species (100%)
JASK000203-37 Ninth floor, Room 9173, beneath wallpaper, west window	Wipe, Stachybotrys Culture and Total Fungal Count	20 cfu/in ²	Fungus isolated, ID to follow (100%)

Sample Location	Sample Type	Result	Organisms Isolated
JASK000203-38 Ninth floor, Room 9173, on concrete floor, beneath carpet	Wipe, Total Fungal Count w/ lds	40 cfu/in ²	Penicillium species (67%) Paecilomyces species (33%)
JASK000203-38 Ninth floor, Room 9173, on concrete floor, beneath carpet	Wipe, Stachybotrys Culture and Total Fungal Count	10 cfu/in ²	Penicillium species (100%)
JASK000204-1 Sixth floor, Suite 602, entrance to Mr. Richey's office	Air, Total Fungal Count w/ lds	21 cfu/m ³	Penicillium species (34%) Chrysosporium species (33%) Sterilia mycelia (33%)
JASK000204-1 Sixth floor, Suite 602, entrance to Mr. Richey's office	Air, Stachybotrys culture	No Growth	N/A
JASK000204-2 Sixth floor, Suite 601, open area near Waiter's Club	Air, Total Fungal Count w/ lds	7 cfu/m ³	[REDACTED]
JASK000204-2 Sixth floor, Suite 601, open area near Waiter's Club	Air, Stachybotrys Culture	21 cfu/m ³	Penicillium species (34%) Chrysosporium species (33%) Sterilia mycelia (33%)
JASK000204-3 Sixth floor, Suite 601, Y. Askew's cubicle	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000204-3 Sixth floor, Suite 601, Y. Askew's cubicle	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000204-4 Fourth floor, Suite 403, E. Forbes' office	Air, Total Fungal Count w/ lds	7 cfu/m ³	Chrysosporium species (100%)
JASK000204-4 Fourth floor, Suite 403, E. Forbes' office	Air, Stachybotrys Culture	21 cfu/m ³	Sterilia mycelia (100%)
JASK000204-5 Fourth floor, Suite 401, hall at Pepsi machine	Air, Total Fungal Count w/ lds	7 cfu/m ³	Penicillium species (100%)
JASK000204-5 Fourth floor, Suite 401, hall at Pepsi machine	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-6 Eighth floor, Suite 810, reception area of L. DeLoach	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000204-6 Eighth floor, Suite 810, reception area of L. DeLoach	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-7 Eighth floor, Suite 810, Room 8008	Air, Total Fungal Count w/ lds	28 cfu/m ³	Penicillium species (50%) Chrysosporium species (50%)
JASK000204-7 Eighth floor, Suite 810, Room 8008	Air, Stachybotrys Culture	7 cfu/m ³	Sterilia mycelia (100%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000204-8 Eighth floor, Suite 808, reception area at E. Hemsath's office	Air, Total Fungal Count w/ lds	7 cfu/m ³	Black yeast (100%)
JASK000204-8 Eighth floor, Suite 808, reception area at E. Hemsath's office	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-13 Ninth floor, Room 9053	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000204-13 Ninth floor, Room 9053	Air, Stachybotrys Culture	7 cfu/m ³	Penicillium species (100%)
JASK000204-14 Ninth floor, Room 9161	Air, Total Fungal Count w/ lds	28 cfu/m ³	Penicillium species (50%) Chaetomium species (25%) Black yeast (10%)
JASK000204-14 Ninth floor, Room 9161	Air, Stachybotrys Culture	70 cfu/m ³	Penicillium species (70%) Paecilomyces species (20%) Sterilia mycelia (10%)
JASK000204-15 First floor, Suite 103 (BC2A Program Office), Room 150	Air, Total Fungal Count w/ lds	14 cfu/m ³	Penicillium species (100%)
JASK000204-15 First floor, Suite 103 (BC2A Program Office), Room 150	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-16 First floor, Suite 105 (DISA Counter Drug Office)	Air, Total Fungal Count w/ lds	150 cfu/m ³	Penicillium species (95%) Cladosporium species (5%)
JASK000204-16 First floor, Suite 105 (DISA Counter Drug Office)	Air, Stachybotrys Culture	98 cfu/m ³	Penicillium species (79%) Cladosporium species (7%) Rhodotorula species (7%) Yeast (7%)
JASK000204-17 First floor, Suite 107 (SSO), open area, center	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000204-17 First floor, Suite 107 (SSO), open area, center	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-18 First floor, Suite 100 (Security), Room 107	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000204-18 First floor, Suite 100 (Security), Room 107	Air, Stachybotrys Culture	7 cfu/m ³	Alternaria species (100%)
JASK000204-19 Sixth floor, Suite 602, Mr. Cole's desk	Air, Total Fungal Count w/ lds	7 cfu/m ³	Cladosporium species (100%)
JASK000204-19 Sixth floor, Suite 602, Mr. Cole's desk	Air, Stachybotrys Culture	14 cfu/m ³	Sterilia mycelia (50%) Alternaria species (50%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000204-20 Fourth floor, Suite 400, M. Brayleih's cubicle	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000204-20 Fourth floor, Suite 400, M. Brayleih's cubicle	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (50%) Alternaria species (50%)
JASK000204-21 Fourth floor, Suite 400, M. Maloney's office	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000204-21 Fourth floor, Suite 400, M. Maloney's office	Air, Stachybotrys Culture	7 cfu/m ³	Sterilia mycelia (100%)
JASL000204-22 Fourth floor, Suite 404, Room 470, rear	Air, Stachybotrys Culture	No Growth	N/A
JASL000204-22 Fourth floor, Suite 404, Room 470, rear	Air, Total Fungal Count w/ lds	No Growth	N/A
JASK000204-23 Outside air, roof	Air, Stachybotrys Culture	No Growth	N/A
JASK000204-23 Outside air, roof	Air, Total Fungal Count w/ lds	14 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000209-01 Sixth floor, Suite 624, Room 635	Air, Stachybotrys Culture	110 cfu/m ³	Penicillium species (100%)
JASK000209-01 Sixth floor, Suite 624, Room 635	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000209-02 Sixth floor, Suite 624, reception area, Room 650	Wipe, Total Fungal Count w/ lds	7 cfu/m ³	Sterilia mycelia (100%)
JASK000209-02 Sixth floor, Suite 624, reception area, Room 650	Air, Stachybotrys Culture	21 cfu/m ³	Penicillium species (67%) Cladosporium species (33%)
JASK000209-03 Sixth floor, Suite 638-640, Room 638, reception	Wipe, Total Fungal Count w/ lds	49 cfu/m ³	Penicillium species (14%) Cladosporium species (14%)
JASK000209-03 Sixth floor, Suite 638-640, Room 638, reception	Air, Stachybotrys Culture	42 cfu/m ³	Cladosporium species (33%)
JASK000209-04 Fifth floor, Suite 538-542, Sam Brown's office, Room 539	Wipe, Total Fungal Count w/ lds	21 cfu/m ³	Aspergillus species (67%) Penicillium species (33%)
JASK000209-04 Fifth floor, Suite 538-542, Sam Brown's office, Room 539	Air, Stachybotrys Culture	28 cfu/m ³	Aspergillus species (75%) Cladosporium species (25%)
JASK000209-05 Fifth floor, Suite 538-542, GME room	Wipe, Total Fungal Count w/ lds	21 cfu/m ³	Penicillium species (50%) Paecilomyces species (25%)

Sample Location	Sample Type	Result	Organisms Isolated
JASK000209-05 Fifth floor, Suite 538-542, GME room	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (50%) [Redacted] (50%)
JASK000209-06 Sixth floor, Suite 638-640, Room 636	Wipe, Total Fungal Count w/ lds	14 cfu/m ³	[Redacted] Sterilia mycelia (50%)
JASK000209-06 Sixth floor, Suite 638-640, Room 636	Air, Stachybotrys Culture	14 cfu/m ³	[Redacted] (50%) Cladosporium species (50%)
JASK000209-07 Skyline IV, first floor, Suite 110, Room 105, Karen Brown's office	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000209-07 Skyline IV, first floor, Suite 110, Room 105, Karen Brown's office	Air, Stachybotrys Culture	7 cfu/m ³	Stachybotrys chartarum (atra) (100%)
JASK000209-13 Fifth floor, Randall Koran's office, Suite 550-559	Wipe, Total Fungal Count w/ lds	21 cfu/m ³	Penicillium species (67%) Sterilia mycelia (33%)
JASK000209-13 Fifth floor, Randall Koran's office, Suite 550-559	Air, Stachybotrys Culture	42 cfu/m ³	Penicillium species (66%) Cladosporium species (17%) Sterilia mycelia (17%)
JASK000209-14 Fifth floor, Sherrell Kern's cubicle, Suite 550-559	Wipe, Total Fungal Count w/ lds	Unable to quantitate due to nature of mucoraceous organism.	Penicillium species Rhizopus species
JASK000209-14 Fifth floor, Sherrell Kern's cubicle, Suite 550-559	Air, Stachybotrys Culture	Unable to quantitate due to nature of mucoraceous organism.	Penicillium species (75%) Rhizopus species (25%)
JASK000209-15 Fifth floor, Lt. Colonel Teresa Somnese, Suite 550-559	Wipe, Total Fungal Count w/ lds	21 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000209-15 Fifth floor, Lt. Colonel Teresa Somnese, Suite 550-559	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (50%) Sterilia mycelia (50%)
JASK000209-16 Fifth floor, Suite 517, Sonya Mercurius	Wipe, Total Fungal Count w/ lds	98 cfu/m ³	Penicillium species (7%) Pithomyces species (7%) Sterilia mycelia (7%)
JASK000209-16 Fifth floor, Suite 517, Sonya Mercurius	Air, Stachybotrys Culture	14 cfu/m ³	[Redacted] Alternaria species (50%)
JASK000209-17 Fifth floor, Suite 517, Mark McKenzie	Wipe, Total Fungal Count w/ lds	42 cfu/m ³	Penicillium species (34%) [Redacted] Sterilia mycelia (33%)
JASK000209-17 Fifth floor, Suite 517, Mark McKenzie	Air, Stachybotrys Culture	28 cfu/m ³	[Redacted] (75%) Penicillium species (25%)
JASK000209-18 Fifth floor, Suite 500, M. Graves' cubicle	Wipe, Total Fungal Count w/ lds	7 cfu/m ³	[Redacted]

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000209-18 Fifth floor, Suite 500, M. Graves' cubicle	Air, Stachybotrys Culture	7 cfu/m ³	Aspergillus species (100%)
JASK000209-19 Fifth floor, Suite 500, cubicle area, Ms. Harrington	Wipe, Total Fungal Count w/ Ids	7 cfu/m ³	Alternaria species (100%)
JASK000209-19 Fifth floor, Suite 500, cubicle area, Ms. Harrington	Air, Stachybotrys Culture	14 cfu/m ³	Penicillium species (100%)
JASK000209-20 Outside air, roof	Wipe, Total Fungal Count w/ Ids	77 cfu/m ³	Penicillium species (45%) Sterilia mycelia (36%) Cladosporium species (11%)
JASK000209-20 Outside air, roof	Air, Stachybotrys Culture	35 cfu/m ³	Cladosporium species (40%) Aspergillus species (20%) Alternaria species (20%) Penicillium species (20%)
JASK000210-01 Sixth floor, Suite 638-640, north, AHU1, Room 638, reception, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-01 Sixth floor, Suite 638-640, north, AHU1, Room 638, reception, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-02 Sixth floor, Suite 624, north, AHU1, reception, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-02 Sixth floor, Suite 624, north, AHU1, reception, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-03 Sixth floor, Suite 602, south, AHU2, entrance to Mr. Richey's office, supply louver	Wipe, Total Fungal Count w/ Ids	10 cfu/in ²	Sterilia mycelia (100%)
JASK000210-03 Sixth floor, Suite 602, south, AHU2, entrance to Mr. Richey's office, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-04 Sixth floor, Suite 601, south, AHU2, Y. Askew's cubicle, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-04 Sixth floor, Suite 601, south, AHU2, Y. Askew's cubicle, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-05 Fourth floor, Suite 400, south, AHU2, J. Thomas, supply louver	Wipe, Total Fungal Count w/ Ids	No Growth	N/A
JASK000210-05 Fourth floor, Suite 400, south, AHU2, J. Thomas, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000210-06 Fourth floor, Suite 403, north, AHU1, E. Forbes, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-06 Fourth floor, Suite 403, north, AHU1, E. Forbes, supply louver	Air, Stachybotrys Culture	No Growth	N/A
JASK000210-07 Fourth floor, Suite 401, north, AHU1, in hall 36' east of Pepsi machine, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-07 Fourth floor, Suite 401, north, AHU1, in hall 36' east of Pepsi machine, supply louver	Air, Stachybotrys Culture	No Growth	N/A
JASK000210-08 Fourth floor, Suite 404, north, AHU1, Cubicle 402C, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-08 Fourth floor, Suite 404, north, AHU1, Cubicle 402C, supply louver	Air, Stachybotrys Culture	No Growth	N/A
JASK000210-09 Eighth floor, Suite 808, south, AHU2, receptionist area for Keegan, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-09 Eighth floor, Suite 808, south, AHU2, receptionist area for Keegan, supply louver	Air, Stachybotrys Culture	No Growth	N/A
JASK000210-10 Eighth floor, Suite 810, south, AHU2, receptionist for DeLoach, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-10 Eighth floor, Suite 810, south, AHU2, receptionist for DeLoach, supply louver	Air, Stachybotrys Culture	No Growth	N/A
JASK000210-11 Fifth floor, Suite 500-559, north, AHU1, receptionist for Matthew, supply louver	Wipe, Total Fungal Count w/ lds	20 cfu/in ²	Rhizopus species (50%)
JASK000210-11 Fifth floor, Suite 500-559, north, AHU1, receptionist for Matthew, supply louver	Air, Stachybotrys Culture	No growth	N/A
JASK000210-12 Fifth floor, Suite 517, north, AHU1, Mercurius' office, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-12 Fifth floor, Suite 517, north, AHU1, Mercurius' office, supply louver	Air, Stachybotrys Culture	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000210-13 Fifth floor, Suite 500, south, AHU2, Szymanski's office, supply louver	Wipe, Total Fungal Count w/ lds	150 cfu/in ²	Aspergillus species (66%) [REDACTED] (34%)
JASK000210-13 Fifth floor, Suite 500, south, AHU2, Szymanski's office, supply louver	Air, Stachybotrys Culture & Total	100 cfu/in ²	Aspergillus species (100%)
JASK000210-14 Fifth floor, Suite 537-544, north, AHU1, Room 599, supply louver	Wipe, Total Fungal Count w/ lds	30 cfu/in ²	Cladosporium species (66%) Aspergillus species (34%)
JASK000210-14 Fifth floor, Suite 537-544, north, AHU1, Room 599, supply louver	Air, Stachybotrys Culture & Total	30 cfu/in ²	Cladosporium species (66%) Aspergillus species (34%)
JASK000210-15 Ninth floor, Room 9182, south, AHU2, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-15 Ninth floor, Room 9182, south, AHU2, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-16 Ninth floor, conference room, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-16 Ninth floor, conference room, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-17 Ninth floor, Room 9113, north, AHU1, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-17 Ninth floor, Room 9113, north, AHU1, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-18 Ninth floor, Room 9112, north, AHU1, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-18 Ninth floor, Room 9112, north, AHU1, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-19 Ninth floor, Room 9116, north, AHU1, supply louver	Wipe, Total Fungal Count w/ lds	40 cfu/in ²	Penicillium species (75%) Sterilia mycelia (25%)
JASK000210-19 Ninth floor, Room 9116, north, AHU1, supply louver	Air, Stachybotrys Culture & Total	30 cfu/in ²	Penicillium species (100%)
JASK000210-20 Ninth floor, Room 9101, north, AHU1, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-20 Ninth floor, Room 9101, north, AHU1, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000210-21 Ninth floor, Room 9121, north, AHU1, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-21 Ninth floor, Room 9121, north, AHU1, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-22 Ninth floor, Room 9128, north, AHU1, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-22 Ninth floor, Room 9128, north, AHU1, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-23 Ninth floor, Room 9137, north, AHU1, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-23 Ninth floor, Room 9137, north, AHU1, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-24 Ninth floor, Room 9150, south, AHU2, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-24 Ninth floor, Room 9150, south, AHU2, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-25 Ninth floor, Room 9163, south, AHU2, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-25 Ninth floor, Room 9163, south, AHU2, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-26 Ninth floor, Room 9158, south, AHU2, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-26 Ninth floor, Room 9158, south, AHU2, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-27 Ninth floor, Room 9198, south, AHU2, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-27 Ninth floor, Room 9198, south, AHU2, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-28 Ninth floor, Room 9187A, south, AHU2, supply louver	Wipe, Total Fungal Count w/ lds	No Growth	N/A
JASK000210-28 Ninth floor, Room 9187A, south, AHU2, supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-29 First floor, Suite 107, south, AHU2, rear room supply louver	Wipe, Total Fungal Count w/ lds	10 cfu/in ²	Sterilia mycelia (100%)

Sampling Location	Sample Type	Result	Organisms Isolated
JASK000210-29 First floor, Suite 107, south, AHU2, rear room supply louver	Air, Stachybotrys Culture & Total	No Growth	N/A
JASK000210-30 AHU1, filter side of coil, supply air system	Wipe, Total Fungal Count w/ Ids	100 cfu/in ²	Rhodotorula species (40%) Streptomyces species (30%) Sterilia mycelia (20%) Aureobasidium species (10%)
JASK000210-30 AHU1, filter side of coil, supply air system	Air, Stachybotrys Culture & Total	130 cfu/in ²	Streptomyces species (69%) Sterilia mycelia (15%) Penicillium species (8%) Cladosporium species (8%)
JASK000210-31 AHU1, fan side of coil, supply air system	Wipe, Total Fungal Count w/ Ids	5400 cfu/in ²	Rhodotorula species (87%) Yeast (8%) Cladosporium species (1%) Penicillium species (1%) Pithomyces species (1%)
JASK000210-31 AHU1, fan side of coil, supply air system	Air, Stachybotrys Culture & Total	6100 cfu/in ²	Rhodotorula species (90%) Yeast (3%) Penicillium species (1%) Cladosporium species (1%) Sterilia mycelia (1%)
JASK000210-32 AHU1, axial vane, return air system	Wipe, Total Fungal Count w/ Ids	80 cfu/in ²	Chaetomium species (38%) Aspergillus species (25%) Penicillium species (12%) Epicoccum species (12%) Cladosporium species (12%)
JASK000210-32 AHU1, axial vane, return air system	Air, Stachybotrys Culture & Total	80 cfu/in ²	Aspergillus species (63%) Chaetomium species (27%)
JASK000210-33 AHU1, axial vane, return air system	Wipe, Total Fungal Count w/ Ids	70 cfu/in ²	Chaetomium species (86%) Aspergillus species (14%)
JASK000210-33 AHU1, axial vane, return air system	Air, Stachybotrys Culture & Total	60 cfu/in ²	Chaetomium species (66%) Cladosporium species (17%) Rhizopus species (17%)
JASK000210-34 AHU2, filter side of coil, supply air system	Wipe, Total Fungal Count w/ Ids	60 cfu/in ²	Alternaria species (34%) Yeast (17%) Black yeast (17%) Cladosporium species (16%) Sterilia mycelia (16%)
JASK000210-34 AHU2, filter side of coil, supply air system	Air, Stachybotrys Culture & Total	90 cfu/in ²	Sterilia mycelia (56%) Alternaria species (11%) Yeast (11%) Cladosporium species (11%) Penicillium species (11%)
JASK000210-35 AHU2, fan side of coil, supply air system	Wipe, Total Fungal Count w/ Ids	6900 cfu/in ²	Streptomyces species (56%) Rhodotorula species (40%) Cladosporium species (1%) Sterilia mycelia (1%)
JASK000210-35 AHU2, fan side of coil, supply air system	Air, Stachybotrys Culture & Total	3800 cfu/in ²	Streptomyces species (51%) Rhodotorula species (43%) Cladosporium species (1%) Epicoccum species (1%)
JASK000210-36 AHU2, shaft side, axial vane, return air system	Wipe, Total Fungal Count w/ Ids	30 cfu/in ²	Penicillium species (34%) Aspergillus species (33%) Streptomyces species (33%)

Sample Identification	Sample Type	Result	Organisms Isolated
JASK000210-36 AHU2, shaft side, axial vane, return air system	Wipe, Stachybotrys Culture & Total	10 cfu/in ²	Stachybotrys chartarum (atra) (100%)
JASK000210-37 AHU2, motor side axial vane, return air system	Wipe, Total Fungal Count w/ Ids	150 cfu/in ²	Penicillium species (60%) Aspergillus species (7%) Rhizopus species (7%) Aspergillus niger (7%) Chaetomium species (7%)
JASK000210-37 AHU2, motor side axial vane, return air system	Wipe, Stachybotrys Culture & Total	190 cfu/in ²	Penicillium species (42%) [REDACTED] Cladosporium species (16%) Stachybotrys chartarum (atra) (5%) Chaetomium species (5%)

Room 9173 (9112):

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- New ceiling tiles
- Removed valence (not to be reinstalled)
- Installed new blinds
- Built-in cabinets removed - *need handles*
- New cabinets installed
- Removed vinyl wall covering (not to be re-installed)

Needs to be done

- New carpet or shampoo
- Clean exterior window

One bus
cleaning pen by cabinet

Room 9191:

Done

- Cleaned window frame
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Installed new blinds
- Cleaned window frame

Room 9199:

To be done

- Remove vinyl wall covering
- Drywall patch and paint
- Remove drapes

Rooms 9201, 9112 (the real 9112), 9110, 9180, 9180A:

To be done

- Clean with bleach solution

Room 9121 (copier room):

To be done

- Replace stained ceiling tile

Room 9131:

Done

- Window frame cleaned

Please note the quality of workmanship has been poor. The metal refinisher had to paint the window frames twice and the painters had to paint the walls twice because proper preparation was not done. This is causing the agency to be inconvenienced more than they should be.

DISA, GSA and FCA have agreed room 9181 (conference room) has been inoperable since November 5, 1999 and room 9173 (9112) has been inoperable since January 6, 2000.

Another inspection has been scheduled to take place on March 3, 2000 at 1:30 with the DISA, GSA, CES, and FCA.

DISA informed FCA on March 3, that 48 Hours aired a program on Stachybotrys the evening of March 2. Several DISA employees viewed the program and are very concerned.



**General Services Administration
National Capital Region
Washington, DC 20407**

SKY 5, 9TH FLOOR

02/02/00 DISA called at 2:00pm, water leak in the ceiling in room 9209. Meet with CES & DISA on site. Notified DOD. CES taking care of leak.

02/03/00 Metal refinisher to repair the metal finishes on the damaged window frames. Meet with DOD @ 8:00am on 9th floor.

02/04/00 Structural specialist to inspect window framing structure in conference room 9182, findings to follow. CES, GSA & DOD were on site. GSA DOD checked the progress of the roof replacement, CES states that 20% of the south George Mason Dr. will be complete.
* The structural specialist found the window framing in sound condition. A written report confirming this will follow from CES. CES looked at Room 9209 where the drywall is cracked over the building expansion joint. This is natural movement since the wall didn't have the correct expansion filler joint attached (hard connection instead of flexible). Room 9191 is leaking due to roof work (nothing serious), this may happen in different areas as the roof is being repaired. Checked the roof with CES, work is progressing well considering the weather this week.

02/05/00 CES to repair drywall, paint and replace ceiling tiles.

02/07/00 Metal refinisher has completed rooms 9183-9188. They still have rooms 9167, 91, 89, 93, 81, 13 and 9195 to complete. Helen Creel with DISA is requesting that the wall paper in rooms 9167, 9199 and 9119 be removed and the walls painted. Room 9167 has a small window leak, this is an old leak.

02/08/00 Walked all Sky 5 checking every floor for Govt. personnel. Applied to start testing through out the building on 02/09/00. E-mailed all findings to Trish Gretsky.

02/09/00 DISA called at 7:30am with another leak in room 9157. GSA responded over to Sky 5 and found water had filled up a light fixture and soaked a ceiling tile. The roofers are working right over this space. CES is taking care of the problem. DoD Bldg. Mgt. was notified and responded. Applied will be doing testing today and Thurs. the 10th. All arraignments have been made for them to access spaces.

- 02/10/00 1:30pm, walk through with CES, window cleaner to clean windows. New cleaner worked well on windows. CES will remove all wall covering on the 9th floor per Ms. Creel request (see letter). Room 9209 is having a flexible expansion joint added to the drywall (see 02/04/00).
- 2/14/00 Called Tracy Terwilliger w/DISA to see if any leaks penetrated the roof this weekend. None have been reported. Window framers to work Sat. 19th to refinish windows. Window cleaners to work during the week (daytime). All wallpaper was removed 02/12/00, except for room 9199 (this will be done at a later date), sanding and painting will be done the weekend of the 19th. On the roof, all water proofing is complete (unofficially), flashing and insulating will be put down this week.
- 02/15/00.....DISA/DOD approved replacing the cabinet in room 9173
- 02/17/00.....Refinish mullions (window frames), sand & prime repaired areas and strip wallpaper backing in room 9119 (this will be completed after hours).
- 02/18/00.....Painting in repaired areas (after hours). CES has asked for an extension on the Cure letter for roof leak repair at Sky 5. Their request was reviewed and granted through Friday, March 10, 2000. The date provides for several additional days in case of delays due to inclement weather. On site inspection by all parties involved to survey progress of construction work.
- 02/22/00.....Walk through with CES, DOD and GSA Sky 5, 9th floor. Room 9167 walls were not skimmed/prepared before painting, cove base and carpets need cleaning. Room 9191 new paint peeling off the window frame. Room 9198 ceiling tile needs replacing and corner moulding put back. Room 9188 wall needs paint touch-up, looks like they did a rush job. Room 9187A painting is good but the furniture was banged up against the wall when put back in place leaving one small hole and a black mark on the newly painted wall. Room 9182 the side wall does not look like it was painted/or marks on the wall faded through new paint and new paint coming up from the window frame. Room 9181 new paint peeling from window frame. Room 9114 room all painted, looks good. Room 9119 both side walls need touch-up painting and ceiling tile needs to be replaced. CES is addressing the painting and the peeling of the new finish on the window frames. ** An inspection was done of all DISA space in Skyline except for Sky 3 which will be done at a later date. CES wanted to see if there are any concerns in these areas. GSA, DOD, DISA Real Estate & Facilities & CES.

- 02/24/00.....GSA, CES & DISA/DOD checked the refinishing of the window frames. What has been completed looks excellent.
The carpet will arrive today for the offices that require replacement. It will not be installed until all the painting is complete.
A sample of blue was taken from the office by the conference room. The color should have been grey to match the hall and offices, if this becomes a problem CES will address it. The conference room drapes are going out today to be cleaned.
- 02/29/00.....GSA & DOD reviewed space, as reported 2/22 rooms 9188, 9187A & 9119 still need touch-up painting/9114 need patch cove base/9187A small dent on drywall needs to be patched/9191 drywall by window needs patching from water leak damage/conference room column by window drywall patching needed/copy room-replace wet tile/9209 replace damaged tile.
- 03/01/00.....Took the deficiency dated 02/29/00 above to Bob Moltz, CES Construction Manager and addressed the above problems. He assured me they would be taken care of. CES worked Sky 5, 9th floor the 29th and the 1st after hours. There is a good possibility rugs will be replaced or cleaned again and the fabric furniture will be cleaned as needed.
- 03/02/00.....Reviewed space concerns with DISA-DOD, DOD & GSA.
 - * If carpet is replaced in conference room, it must be the same grade and design. (CES said it will be replaced)
 - * After the conference room chairs are cleaned DISA would like them tested. (they are foam padded)
 - * 9112 the external window needs to be cleaned.
New wood cabinets are being installed in Mr. Millers office today. CES will now notify GSA and we will set up time frames for working in DISA space so personnel will not be interrupted without notice.
- 03/03/00.....CES Construction to work Sat. 4th on list of 2/29 above.
- 03/06/00.....Sat. work consisted of about ten minutes per DISA. The column in the conference was fixed and some paint put over the dent in room 9197A. CES will have the painter, tile man and the cabinet man on site the 7th/Tuesday.

Sam,

We inspected the 9th floor again yesterday. The following reflects what has been done and what still needs to be done:

Room 9181 (Conference Room):

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- Replaced base board
- New ceiling tiles
- Cleaned drapes
- Installed new blinds

Needs to be done

- New carpet
- Clean chairs
- Replace window
- Hang drapes
- Light fixture repaired or replaced
- Re-skim drywall on column

Rooms 9182, 9187A, 9187B, 9188, 9189:

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- Replaced cove base
- Installed new blinds

Needs to be done

- Replace ceiling tiles w/water stains

Room 9113:

Done

- Contaminated drywall removed
- All surfaces cleaned w/bleach solution
- Drywall patched and painted
- Window frames painted (twice)
- Installed new blinds

9207
ceiling tile
*fixing hole in wall
cold
get Bonnie



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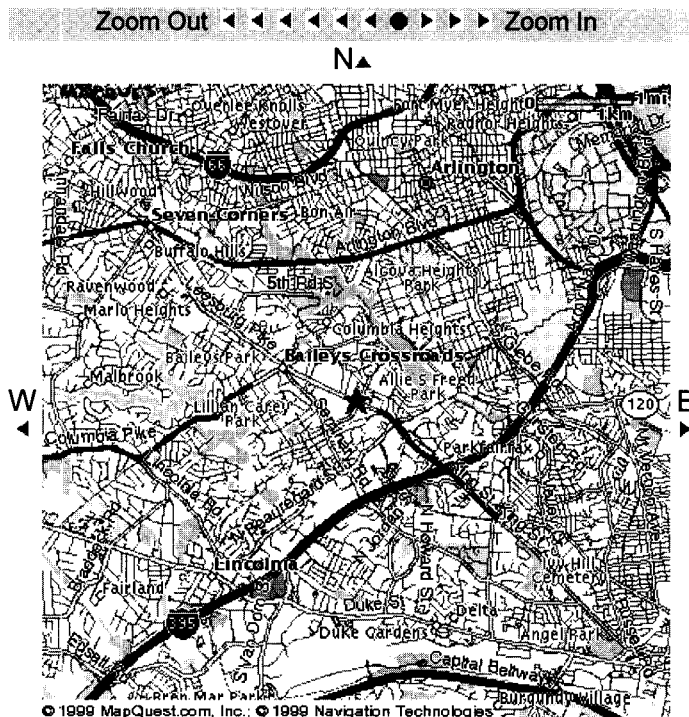
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Jim T...

MEMORANDUM

TO: Craig Gerardi

FROM: Jonathan Schatz *JS*

DATE: January 28, 2000

RE: Skyline 5 – 9th Floor
Results of Air and Wipe Sampling for *Stachybotrys Chartarum* (Revised)

Executive Summary

At your request, AAS Environmental, Inc., (AASE) conducted an inspection and testing of water damaged areas of the ninth floor of 5 Skyline Place, 5111 Leesburg Pike in Falls Church, Virginia. This investigation was prompted by the identification of fungi (*Stachybotrys chartarum*) in water damaged areas of the tenant suite. This fungi was identified during limited testing performed by the tenant's environmental consultant, Applied Environmental, Inc. AASE conducted additional sampling to determine the extent of the problem, while Building Management works toward repairing the roof leaks in the office area.

The air and surface wipe samples collected in the occupied office areas and the supply air ducts by AASE do not indicate an exposure hazard to area occupants. Exploratory demolition did not identify any additional reservoirs of actively growing *Stachybotrys chartarum*.

Stachybotrys chartarum spores were present in varying concentrations above the suspended ceilings of the conference room, Room 9182, and Room 9113. The areas above these offices, and above Room 9112, have been professionally cleaned and treated with a biocide. Spores were also identified at the main return air grill in the common hallway above the suspended ceiling at the water fountains. At this time, these spores are assumed to exist in the roughly triangular area above the suspended ceiling ranging between the corridor outside Room 9182, the corridor outside Room 9113, and this return air grill.

Recommendations include performing additional testing to further delineate the extent of and concentrations of *Stachybotrys chartarum* spores above the suspended ceiling. Until this testing and any necessary cleaning is completed, ceiling tiles in this area should not be disturbed by building occupants, engineers, or outside contractors.

Background

AASE was first informed of the discovery of fungal growth in the vicinity of the 9th floor conference room on November 5, 1999. On November 6, 1999, affected areas of drywall were removed from this conference room, Room 9183, and Room 9113. This work was performed by The Environmental Group (TEG), a professional environmental remediation firm. Selected exploratory demolition in several other water-damaged offices did not reveal any additional evidence of fungal growth. Subsequent limited testing by the tenant's environmental consultant, Applied Environmental, on December 2 and 3, 1999, showed low levels of *Stachybotrys chartarum* on some surfaces in the conference room and Room 9182, and low airborne levels of this fungus in these same rooms. *Stachybotrys chartarum* was also identified above the suspended ceiling in the return air plenum.

Accessible surfaces in these offices were professionally cleaned on January 5, 2000, by TEG. On January 6, AASE performed sampling of the air and dust in this suite to determine the presence and extent of any remaining *Stachybotrys chartarum*.

Testing and Sample Analysis

AASE collected a total of nine air samples to characterize viable airborne fungi in the suite. Eight of these samples were collected in various complaint and non-complaint areas in the vicinity of the 9th Floor Conference Room. One sample was also collected outside the building to provide a baseline for comparison. Samples were collected using a single stage/N6 Anderson Bioaerosol Sampler, which draws air through a microsieve plate at a calibrated rate. Organisms are collected on agar plates for incubation and identification by the laboratory. Both MEA and SDA agar media were used to increase the possibility of detecting *Stachybotrys chartarum*. These samples were analyzed by Aerobiology Laboratory Associates, Inc. of Reston, Virginia. A summary of these analyses can be found in Table I, and the analytical report is included in Appendix A.

TABLE I
Results of Air Sampling

Sample ID	Location	<i>Stachybotrys</i> Isolated? (Yes/No)	Fungal Analysis (cfu/m ³)
1600JSA/1	Conference Room	No	Total Count: 7
			100% <i>Penicillium</i> species
1600JSA/2	Room 9113	No	Total Count: 21
			67% <i>Sterilia</i> mycelia 33% <i>Cladosporium</i> species
1600JSA/3	Room 9110	No	Total Count: 21
			100% <i>Sterilia</i> mycelia

Sample ID	Location	<i>Stachybotrys</i> Isolated? (Yes/No)	Fungal Analysis (cfu/m ³)
1600JSA/4	Room 9182	Yes	Total Count: 28
			34% <i>Stachybotrys chartarum</i> 33% <i>Penicillium</i> species 33% <i>Sterilia mycelia</i>
1600JSA/5	Office of Mr. LaManna (Room 9187)	No	Total Count: 49
			86% <i>Penicillium</i> species 14% <i>Cladosporium</i> species
1600JSA/6	Room 9148	No	Total Count: 14
			100% <i>Sterilia mycelia</i>
1600JSA/7	Room 9189	No	Total Count: 28
			50% <i>Aspergillus</i> species 25% <i>Penicillium</i> species 25% <i>Aspergillus fumigatus</i>
1600JSA/8	Room 9112	No	Total Count: 21
			67% <i>Sterilia mycelia</i> 33% <i>Penicillium</i> species
1600JSA/9	Building Exterior	No	Total Count: 110
			56% <i>Sterilia mycelia</i> 19% <i>Cladosporium</i> species 13% <i>Penicillium</i> species

Note: cfu/m³ = colony forming units per cubic meter

Microbial wipe samples were collected from various locations throughout the affected area to define the extent and concentration of *Stachybotrys chartarum* spores in the area. Specifically, wipe samples were collected from the following surfaces:

- surfaces in the conference room and Room 9182 where *Stachybotrys chartarum* was previously identified,
- inside supply air ducts for the space,
- at varying distances from the perimeter wall in affected areas of the floor.

These samples were collected using the Culturette II collection and transport system. While wearing disposable gloves, each sample area was wiped using two rayon-tipped swabs. These swabs were then inserted into a culture tube containing a transport medium for shipment to Aerobiology Laboratory Associates, Inc. A summary of these analyses is included in Table II, and the analytical report is included in Appendix A.

TABLE II
Results of Wipe Sampling

Sample ID	Location	<i>Stachybotrys</i> Isolated? (Yes/No)	Fungal Analysis (cfu/in ²)
1600JSW/1	Inside Supply Duct, Above Conference Room	No	Total Count: 110
			55% Cladosporium species
			18% Chaetomium species
1600JSW/2	Inside Supply Duct, Above Room 9190	No	9% Penicillium species
			Total Count: 200
			50% Penicillium species
1600JSW/3	Inside Supply Duct, Above Room 9118	No	50% Yeast
			Total Count: 0
			No Growth
1600JSW/4	Top of Large Table, Conference Room	No	Total Count: 0
			No Growth
			Total Count: 100
1600JSW/5	Conference Room, Above Ceiling, In Window Trough	No	100% Penicillium species
			Total Count: 1,400
			61% Penicillium species
1600JSW/6	Conference Room, Above Ceiling, 4' From Perimeter	Yes	18% Trichoderma species
			11% <i>Stachybotrys chartarum</i>
			Total Count: 2,500
1600JSW/7	Conference Room, Above Ceiling, 8' From Perimeter	Yes	40% <i>Stachybotrys chartarum</i>
			40% Penicillium species
			20% Aspergillus species
1600JSW/8	Conference Room, Above Ceiling, 12' From Perimeter	Yes	Total Count: 650
			46% <i>Stachybotrys chartarum</i>
			15% Penicillium species
1600JSW/9	Room 9113, Above Ceiling, In Window Trough	Yes	15% Trichoderma species
			Total Count: 50
			80% <i>Stachybotrys chartarum</i>
1600JSW/10	Room 9113, Above Ceiling, 4' From Perimeter	Yes	20% Sterilia mycelia
			Total Count: 250
			60% <i>Stachybotrys chartarum</i>
			20% Penicillium species
			20% Yeast

Sample ID	Location	<i>Stachybotrys</i> Isolated? (Yes/No)	Fungal Analysis (cfu/in ²)
1600JSW/11	Room 9113, Above Ceiling, 8' From Perimeter	Yes	Total Count: 450
			67% <i>Stachybotrys chartarum</i> 33% <i>Penicillium</i> species
1600JSW/12	Room 9113, Above Ceiling, 12" From Perimeter	Yes	Total Count: 100
			50% <i>Stachybotrys chartarum</i> 50% <i>Sterilia mycelia</i>
1600JSW/13	Room 9110, Above Ceiling, 8' From Perimeter	No	Total Count: 0
			No Growth
1600JSW/14	Room 9182, Center of Window Sill	No	Total Count: 6
			100% <i>Penicillium</i> species
1600JSW/15	Room 9182, Above Ceiling, In Window Trough	Yes	Total Count: 50
			100% <i>Stachybotrys chartarum</i>
1600JSW/16	Room 9182, Above Ceiling, 4" From Perimeter	Yes	Total Count: 8,000
			69% <i>Stachybotrys chartarum</i> 31% <i>Penicillium</i> species
1600JSW/17	Room 9182, Above Ceiling, 8' From Perimeter	Yes	Total Count: 550
			82% <i>Penicillium</i> species 18% <i>Stachybotrys chartarum</i>
1600JSW/18	Room 9182, Above Ceiling, 12' From Perimeter	Yes	Total Count: 450
			56% <i>Penicillium</i> species 22% <i>Stachybotrys chartarum</i> 22% <i>Sterilia mycelia</i>
1600JSW/19	Room 9187, Above Ceiling, In Window Trough	No	Total Count: 50
			100% <i>Aspergillus</i> species
1600JSW/20	Room 9187, Above Ceiling, 4' From Perimeter	No	Total Count: 0
			No Growth
1600JSW/21	Room 9187, Above Ceiling, 8' From Perimeter	No	Total Count: 0
			No Growth

Sample ID	Location	<i>Stachybotrys</i> Isolated? (Yes/No)	Fungal Analysis (cfu/in ²)
1600JSW/22	Room 9187, Above Ceiling, 12" From Perimeter	No	Total Count: 50
			100% <i>Aspergillus niger</i>
1600JSW/23	Room 9112, Above Ceiling, In Window Trough	No	Total Count: 0
			No Growth
1600JSW/24	Room 9112, Above Ceiling, 4' From Perimeter	No	Total Count: 50
			100% <i>Sterilia mycelia</i>
1600JSW/25	Return Grill, Above Ceiling At Common Corridor Water Fountains	Yes	Total Count: 150
			67% <i>Stachybotrys chartarum</i> 33% <i>Sterilia mycelia</i>
1600JSW26	Return Grill, Above Ceiling at Opposite side of Common Corridor	No	Total Count: 100
			100% <i>Sterilia mycelia</i>

Note: cfu/in² = colony forming units per square inch

Conclusions

There are currently no Federal or Commonwealth of Virginia regulations establishing exposure limits to *Stachybotrys chartarum* or other fungi. The only available guideline comes from the Guidelines on Assessment and Remediation of *Stachybotrys Atrra (chartarum)* in Indoor Environments, which is published by the New York City Department of Health. This document recommends that when *Stachybotrys chartarum* is identified in a building, prompt action be taken to locate and repair the source of the water infiltration, and to remove the fungal reservoir using appropriate environmental controls. Building management is currently in the process of repairing the roof leaks, and all identified areas of fungal growth have been abated using negative pressure enclosures, HEPA vacuums, and appropriate biocides.

Seven of the eight viable air samples collected in the office showed no *Stachybotrys chartarum*. These samples were collected in the conference room and Rooms 9113, 9110, 9187, 9148, 9189, and 9112. The sample collected in Office 9182 showed a very low total fungal count of 28 colony forming units per cubic meter (cfu/m³), of which only 34% was *Stachybotrys chartarum*. This level is not expected to pose a health hazard to area occupants. The New York City Department of Health Guidelines recommend immediate evacuation of all occupants if airborne concentrations of 1,000 to 10,000 cfu/m³ *Stachybotrys chartarum* or greater is found.

Surface wipe samples collected from the large table in the conference room and the window sill in Room 9182 showed no *Stachybotrys chartarum*.

Three surface wipe samples were collected from inside the supply air ducts above the conference room, Room 9190, and Room 9118. No *Stachybotrys chartarum* was isolated in these samples.

A total of nineteen surface wipe samples were collected at varying distances from the perimeter wall above the ceiling in the conference room and Rooms 9112, 9187, 9182, 9113, and 9110. Test results showed *Stachybotrys chartarum* was present in varying concentrations above the conference room, Room 9182, and Room 9113. These rooms are the same areas where the initial growth was identified and removed on November 6, 1999. On January 20, 22, 23, and 24, 2000, the areas above the suspended ceilings in these three rooms were thoroughly cleaned and the ceiling tiles were removed.

No additional reservoirs of *Stachybotrys chartarum* have been found. Spores isolated in these tests have been in settled dust and their locations and concentrations indicate that they probably originated from the growth previously identified and removed from the vicinity of the conference room.

Stachybotrys chartarum spores were present in varying concentrations above the suspended ceilings of the conference room, Room 9182, and Room 9113. Spores were also identified at the main return air grill in the common hallway above the suspended ceiling at the water fountains. At this time, these spores are assumed to exist in the roughly triangular area above the suspended ceiling ranging between the corridor outside Room 9182, the corridor outside Room 9113, and this return air grill.

Recommendations

Additional testing is recommended to determine the extent of the area above the ceiling where *Stachybotrys chartarum* spores are present. Until this testing and any remediation are completed, tenants, employees, building engineers, and outside contractors should be instructed not to disturb the ceiling tiles or access the area above the suspended ceiling in the triangular area between the return air grill above the water fountain, the corridor outside Room 9182, and the corridor outside Room 9113.

If you have any questions, or if we can be of further service, please feel free to call me at 703/769-1045.

JNS/cmb

cc: Dennis Whitworth
Bud Haney
Brent Bitz
404-4.7

Attachment

From: <LHung@foh.dhhs.gov> AT internet on 03/03/2000 03:28 PM

To: Patricia L. Gretskey/WPY/RW/GSA/GOV

cc:

Subject: Re:Skyline 5 Microbial Results

Trish:

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Philadelphia, PA 19106

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CBS News | 48 Hours

An Insidious Mold

- A Dream House Loses Charm
- Can Mold Cause Brain Damage?



CBS

Melinda Ballard says her dream house was invaded by a dangerous mold.

The couple has abandoned their home. They were forced to move out when their house was invaded by a mold that they say made everyone in their family sick. Erin Moriarty reports.

The couple's 4-year-old son Reese was the first to become ill. "(He was) coughing up blood," she says. "His equilibrium was completely shot; very bad stomach problems; diarrhea; vomiting - it just spanned the whole globe in terms of symptoms."

Soon Ballard became sick; she says she had trouble staying on her feet. Then Allison, an investment banker, began having trouble breathing. He started coughing up blood, Ballard says.

Experts say the family was being poisoned by a black toxic mold, called *Stachybotrys*. The mold, which has been found in all 50 states, in homes, businesses and schools, had invaded their house. Some strains of *Stachybotrys* cause allergies, asthma and skin rashes. Others produce mycotoxins, released into the air. These toxins can seriously damage the lungs and central nervous system.

(CBS) Melinda Ballard and Ron Allison thought theirs was a dream house: a 22-room mansion on 72 acres outside of Austin, Texas.

Ballard, a former New York City public relations executive, thought it offered the perfect way to escape from the big city. "It was my baby," she says. "And it was truly a dream house for me."

It's not a dream anymore.

The Utah Department of Health's Web site has a fact sheet on *Stachybotrys*.

Some strains of *Stachybotrys* cause allergies, asthma skin rashes. Others mycotoxins, release air. These toxins seriously damage the and central nervous

The Enviro Village site has more information on toxic molds.

Last April Dr. David Straus, one of the nation's leading mold experts, ordered the Ballards to evacuate their house. They had to leave at a moment's notice. They left dishes in the dishwasher and food in the refrigerator.

Dr. Straus believes they became sick from breathing in mycotoxins. The mold most

commonly grows as a result of water damage, according to Dr. Straus.

This mold began with a leak in the downstairs bathroom, Ballard says.

"It needs water and it needs some type of organic food source," says Dr. Straus, who is at Texas Tech University. **"They like cellulose,"** he adds. **"Most of the material we use to build houses - like Sheetrock, ceiling tile, wood - fungi can grow on."**

Find out what to do to make your house safe from mold. An expert answers the most common questions.



The mold infiltrated under their flooring, 2,500 square feet of a wooden floor, according to Ballard.

And the mold has contaminated all of the family's possessions, including photographs, Dr. Straus says. It got into the air-conditioning unit and spread its toxins throughout the house. Removing every trace of the mycotoxins may be impossible, say experts hired by the Ballards.

"I mean this is like what happens in a huge flood; you lose everything," Ballard says.

The toxins affected her husband, she adds. He became very forgetful: When he'd go to the grocery store, he'd leave the groceries there, she says.

Allison says his memory loss affected his work.

His co-worker Harold Babbitt noticed the change. **"I would walk into his office, and he would just be staring, like someone who had a stroke,"** Babbitt says. **"There were deals that should have been completed that weren't completed."**

Allison finally resigned.

Since leaving the house, Ballard's symptoms disappeared.

But Reese developed asthma and had trouble in school. Allison went to New York with Reese to see a doctor specializing in treatment of mold exposure illnesses: Dr. Eckhardt Johanning, of Albany, N.Y., who has studied more than 600 patients exposed to toxic mold.

Dr. Johanning found that both Reese and his father had low levels of antibodies, which suggested exposure to a toxin.

Reese should never again be exposed to the mold, Dr. Johanning says. Reese's lungs have been scarred, he says. He also says that Allison has brain damage.

"I'm not saying this is necessarily a permanent condition," Dr. Johanning says. **"The brain can repair itself a lot. But it may take some time to do. Stachybotrys produces very potent chemicals that can cause brain foginess, tremors, problems with the memory."**

Allison, Ballard and their son are not the only family to have trouble with the mold. In Southern California, Julie and Richard Licon found Stachybotrys in the walls and floors of their condominium.

"All the wood was pretty much black from the mold," says Richard Licon.

Their homeowners association agreed to move the Licons and their six children to a hotel while their house was cleaned of mold.

Seven months later, the Licons moved back. But they became convinced the mold was still there. During the seven months in the hotel, the children were not sick, Julie Licon says. When they moved back into their condominium, however, the kids got sick, she adds.

Their 2-year-old, Jordan, had seizures form

mold exposure. These seizures resumed when they moved back, the Licons say. Their other children also experienced a variety of symptoms, from nosebleeds to headaches and dizziness.

They retested their house and found massive amounts of *Stachybotrys* in the air. A spore had grown inside the air-conditioning unit.

So the Licons moved out again. **"The only thing we can take, literally, is the clothes on our back,"** Richard Licon says.

In some cases, *Stachybotrys* may even kill. In Cleveland, Rico Thornton almost died from his mold exposure. He developed pulmonary hemorrhaging - also known as bleeding lung syndrome - an extremely rare condition.

The Centers For Disease Control has details about the pulmonary hemorrhage cases in Cleveland.

Rico, now 3, recovered and appears to be fine.

Dr. Dorr Dearborn, of Rainbow Children's Hospital in Cleveland, who has studied pulmonary hemorrhaging in infants, suggests the mold is not only dangerous but deadly: **"Of the 29 cases (of pulmonary hemorrhaging in infants) that we've studied in depth, we've had five**

deaths. And all five of those have come from homes that were contaminated with *Stachybotrys*."

Case Western University's site has more on pulmonary hemorrhages and *Stachybotrys*.

[Invisible Killers: Main Page](#)

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Stachybotrys (Corda 18327)

What is Stachybotrys?

Stachybotrys is a type of slow growing saprophytic fungus that grows well on materials that have a high cellulose concentration, such as straw, grass, saw dust and lumber. Wet drywall (plaster board) and ceiling tiles can also support the growth of Stachybotrys.

Where is Stachybotrys found?

There are about 15 species of Stachybotrys, with a world wide distribution. Stachybotrys are common in the western states. They grow in areas where the relative humidity is above 55%.

What does Stachybotrys look like?

Stachybotrys mycelial mats are generally pigmented dark olive-gray and appear to be a slimy mass, with smooth margins and may have either a smooth or ridged surface. The spores are more brownish in color. When the growth sporulates, the colony may appear to have a powdery surface. (Note: fungi cannot be identified by their visual appearance of the mycelial mat. Identification requires examination of the fungal spores under a microscope.)

How does Stachybotrys cause disease?

Some strains are thought to produce trichothecene mycotoxins known as Satratoxin F, Satratoxin G, Satratoxin H. They may also produce Verrucarins J and Roridin E. The toxin is present in the fungal spores, which are released into the air. Very low levels of airborne spores usually do not cause any harm.

Persons with chronic exposure to the toxin report cold or flu like symptoms with sore throat, diarrhea, headaches, fatigue, dermatitis, intermittent local hair loss and general malaise. The toxins may also suppress the immune system. In the January 17 issue of the MMWR, Stachybotrys was implicated in a cluster of fatal pulmonary hemorrhage/hemosiderosis among infants. However, the report concluded that further investigation needed to be done to determine the relationship of Stachybotrys to those deaths.

How is Stachybotrys controlled?

Good preventive maintenance can reduce the risk of a problem with molds growing inside the home and other buildings. Homes and buildings with water damage should be repaired and all moldy material should be removed. Avoiding or diminishing other contributors of humidity may help. Some causes and contributors of high humidity may include leaking pipes, water damaged dry walls and ceiling tile (due to leaking pipes, leaking roof or flooding), faulty or obstructed dryer vent connections, use of steaming hot water in washing machines, many showers, faulty or obstructed bathroom/kitchen ventilation fans, boiling water for long periods of time, canning or pressure cooking, hand washing and rack drying knit and delicate

laundry, use of humidifiers and excessive sealing of the home so that there is inadequate air exchange.

Some molds can be killed by cleaning the moldy surface with chlorine, however, Stachybotrys often has a germ mycelium that is buried inside the water damaged surface that may be inaccessible to chlorine. Changing the humidity may lead to death of the Stachybotrys colony. However, changing the humidity may also induce heavy sporulation. While the spores may die quickly, they may remain toxic and may continue to cause allergic reactions. Therefore, it is best to remove all of the water damaged material.

Utah Department of Health
Bureau of Epidemiology
Environmental Epidemiology Program
April 15, 1997

Utah Department of Health

State of Utah

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The EnviroVillage Library Papers

Hazardous Molds in Homes and Offices: Stachybotrys atra and others...

By Eckardt Johanning, MD
Visit **Eastern New York Occupational and Environmental Health Center's**
Home Page for more related information

**Recent research and health investigations shows an alarming rate of
poisonous fungal species in poorly maintained offices/homes with water
damage or moisture problems.**

Background

Certainly Not all molds or fungi are considered "bad" but recently there have been reports linking toxic and allergenic fungi such as *Stachybotrys atra* with ill health in an office building in New York City [[Abstract](#)] and cases of hemorrhagic lung disease in infants *MMWR, Peds & NIOSH & PULMONARY HEMORRHAGE AND HEMOSIDEROSIS IN INFANTS*.

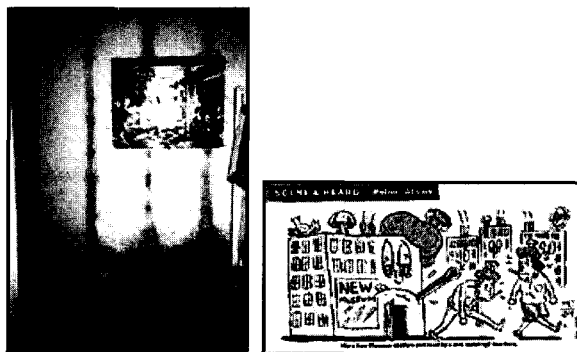
Fungal species have been involved in human suffering since the beginning of time. The earliest account of ill health due to fungal exposure was found in the Book Of Leviticus. Sensitivity to molds was first reported by Floyer who describe an asthmatic reaction after inhalation of molds. Blackley described his own experience after inhalation of penicillium spores as follows:

"The spores of the microscopic fungi I have reason to believe will, when brought into contact with the respiratory mucous membrane, generate symptoms not unlike those of hay fever in some respect but differing materially in others-being much like those of ordinary influenza".

Medically, some fungi are known to cause allergies, hypersensitivity pneumonitis, humidifier fever, infections, mushroom poisoning, mycotoxicoses, and mucous membrane irritation. Some of the *Penicillium*, *Aspergillus*, *Stachybotrys*, *Paecilomyces* and *fusarium* can be hazardous to health under certain conditions.

In order to reduce and control fungal colonization and contamination in indoor

environments, especially those adaptable to indoor environments, an appreciation of the biology of fungi is the first step. The following web pages provide an overview of the most important information and issues pertaining to fungal exposures and negative health consequences. These observations are based on the best information available from professionals involved in this field. If you needed further assistance, you should contact a trained professional.



PAGE 1 OF 9



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Enviro Village

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e-mail questions & comments to **Jeff Salvage**.

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CBS News | 48 Hours

Is Your Building Sick?

- An Expert Explains How To Tell



CBS

The Stachybotrys mold, shown in a magnified view, can cause sick-building syndrome.

(CBS) Dr. David Straus, a scientist from Texas Tech University in Lubbock, Texas, is one of the nation's leading experts on mold exposure and the phenomenon known as sick building syndrome. CBS.com asked Dr Straus to answer some of the most frequently asked questions homeowners have about mold.

What is sick building syndrome?

Sick building syndrome is the result of an indoor air contamination problem.

The usual symptom eye, nose and th irritation, headach fatigue. The symp usually dissipate occupants have l infected buildi

What are the symptoms of SBS?

The usual symptoms include eye, nose and throat irritation, headaches and fatigue. The symptoms usually dissipate once occupants have left an infected building.

What causes SBS?

Some microorganisms negatively affect the body. To date, research has shown two fungi, Penicillium and Stachybotrys, have been linked to this syndrome. These fungi usually grow and cause air problems when building materials, such as walls and carpets, become wet. Combined with a dirty environment, the fungi grow.

What can I do to prevent SBS from occurring?

Check your home to ensure that there are no broken water pipes or roof leaks that could lead to substantial mold growth. Make sure your home is weather-proofed as much as possible to reduce humidity inside the house. And dust your house and change your air filters regularly.

What can I do if I think my home has SBS?

Contact a local air quality business to see if (it) can determine whether your home is having problems. If you are suffering respiratory problems, then contact your local physician or health care professional for additional information.

Invisible Killers: Main Page

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Stachybotrys

PULMONARY HEMORRHAGE AND HEMOSIDEROSIS IN INFANTS



Pediatric Pulmonary
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Pediatric Critical Care
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Cuyahoga County Board of Health



Stachybotrys (dark area) as found on drywall.

Table of Contents:

- ➔ **INTRODUCTION**
 - ➔ **THE CLEVELAND OUTBREAK**
 - ➔ **IS MY MOLD STACHYBOTRYS?**
 - ➔ **HOW TO CLEAN UP MOLD**
 - ➔ **DOES MY INFANT OR CHILD HAVE PULMONARY HEMOSIDEROSIS?**
 - ➔ **PHYSICIAN INFORMATION CONTACT**
 - ➔ **REPORTING A CASE**
 - ➔ **IDIOPATHIC PULMONARY HEMOSIDEROSIS: NATIONAL ORGANIZATION**
 - ➔ **ADULT HEALTH CONCERNS**
 - ➔ **ADDITIONAL INFORMATION AND PUBLICATIONS**
-

Introduction

Over the past several years, there have been a number of young infants (most under 6 months old), in the eastern neighborhoods of Cleveland, who have been coughing up blood due to bleeding in their lungs. Some infants have died and more infants continue to get ill. This bleeding, a disorder called Pulmonary Hemorrhage appears to be caused by something in their home environments, most likely toxins produced by an unusual fungus called *Stachybotrys chartarum* or similar fungi.

What is Pulmonary Hemosiderosis?

Bleeding in the lungs.

What Are The Symptoms?

Severe bleeding can cause coughing up blood or nose bleeds. This is particularly concerning in infants under 6 months old. Chronic, low grade bleeding can cause chronic cough and congestion with anemia.

What Causes The Bleeding?

Call your city or county health department if you have questions or need assistance.

Back

THE CLEVELAND OUTBREAK

Over the past seven years in the Cleveland, Ohio area there have been 45 cases of pulmonary hemorrhage (PH) in young infants. Sixteen of the infants have died. Thirty-two of the infants have been African American. Most of these cases have occurred within ten contiguous zip codes area in the eastern portion of the metropolitan area. In November/December, 1994, the Centers for Disease Control and Prevention (CDC) lead a case-control investigation on the first ten cases. This study found an epidemiological association of PH in these infants with water-damaged homes containing the toxic fungi, predominantly *Stachybotrys*. Several lines of evidence suggest that the most likely causal agents are fungal toxins from a fungus called *Stachybotrys atra*. This somewhat unusual fungus was found in high quantity in the home environments of the affected infants but also to a lesser degree in some of the comparison homes. *Stachybotrys* requires water soaked cellulose to grow, and was found in homes where there had been water damage from flooding, plumbing leaks or roof leaks involving wood or paper products (e.g. insulation, gypsum board, ceiling tile). The spores of this fungus contain very potent mycotoxins which appear to be particularly toxic to the rapidly growing lungs of young infants. The linkage of *Stachybotrys* to PH in infants is on the basis of epidemiological data and has not been conclusively demonstrated. Other factors such as environmental tobacco smoke appear to be important triggers in precipitating overt pulmonary hemorrhage.

More cases continue to occur, a few infants having had only very subtle initial symptoms such as nose bleeds and chest congestion. Concern that there may be a larger number of undetected young infants with this disorder, led to the examination of all infant coroner cases over a three year period, 1993-1995. This revealed seven "SIDS" (sudden infant death syndrome) cases with evidence of preexisting major pulmonary bleeding. All but one of these infants had lived in the ten zip code cluster area.

This disorder is likely to extend beyond Cleveland since an informal national survey of all pediatric pulmonary centers and continued reporting has identified over 100 similar cases of pulmonary hemorrhage in infants across the country over the last seven years.

Back

IS MY MOLD STACHYBOTRYS?

While *Stachybotrys chartarum (atra)* occurs widely in North America, it is probably rather uncommon to find it in homes. It requires water soaked cellulose (wood, paper, and cotton products) to grow. While wet it looks black and slimy perhaps with the edges white, and when dry it looks less shiny. **It is not the only or the most common black mold to be found in these conditions.** If your clean-up is not simple, i.e. your water damage and mold growth is extensive and/or involves structural materials, contact your city or county health

department for assistance in assessing the problem. They can put you in contact with environmental laboratories capable of identifying *Stachybotrys* and with abatement contractors familiar with the precautions and other specifics important for extensive clean-up. If you have a large area of mold growth (greater than two square feet or so), seek professional assistance in the clean-up. You can get quite ill yourself if you inhale a large quantity of the fungal dust or get it on your skin.

Testing for Mold

For a more detailed discussion on the assessment and remediation of *Stachybotrys* in indoor environments, please refer to The Proceedings of the International Conference held on October 6-7, 1994 in Sarasota Springs, NY entitled "*Fungi and Bacteria in Indoor Environments*", pages 201-207, published by the Eastern New York Occupational Health Program [(518)436-5511].

In cases of minor mold contamination, small isolated areas (2 to 10 sq.ft.), testing is usually not necessary. In most of these cases, the area can be addressed by using the clean-up recommendations given elsewhere on this home page.

In cases of more extensive contamination, testing may be necessary. Some private environmental consulting firms may have the ability to conduct home assessments and sample for mold identification. Please refer to the section of your yellow pages entitled "Environmental Consultants" to find a company in your area that might be capable of performing these tasks effectively. Ask if the company has experience with mold testing; it is recommended that several price quotes be obtained for field work and analysis. Consulting firms should be familiar with the American Industrial Hygiene Association (AIHA) document entitled "*Field Guide for the Determination of Biological Contaminants in Environmental Samples*". This document provides guidelines for the sampling of mold in indoor environments. For a list of accredited labs, please see the [AIHA web site](#).

[Back](#)

DOES MY INFANT OR CHILD HAVE PULMONARY HEMOSIDEROSIS?

Pulmonary hemosiderosis is a rare lung disorder which can also occur as part of other medical conditions. If your infant or child is coughing blood, you need to seek medical attention immediately. If your young infant (<6 months old) is having nose bleeds without any injury, you should seek medical attention right away. If your infant or child has chronic cough and chest congestion and is anemic, ask your physician to consider the possibility of pulmonary hemosiderosis among all the other more common diagnostic possibilities.

If your physician would like more information about looking for pulmonary hemosiderosis, have them contact:

Dorr G. Dearborn, Ph.D., M.D.
Pediatric Pulmonary Division
Rainbow Babies & Childrens Hospital
11100 Euclid Avenue

Cleveland, Ohio 44106
FAX (216) 844-5916

If your physician would like consultation regarding pulmonary hemosiderosis have them contact the nearest Pediatric PulmonaryCenter. The local chapter of the American Lung Association can be of assistance if necessary.

Back

REPORTING A CASE

If you are a physician and have had an **infant** with idiopathic pulmonary hemorrhage or hemosiderosis in the past five years, Dr. Dearborn would appreciate your reporting it to us. Reporting forms can be obtained by calling (216) 368-4369.

Back

IDIOPATHIC PULMONARY HEMOSIDEROSIS: NATIONAL ORGANIZATION

Some parents of children with the rare disorder Idiopathic Pulmonary Hemosiderosis have expressed an interest in establishing a national organization. The problem described here with young infants is a form of this disorder but older children can also have IPH from other unknown causes or even an allergy to cow's milk (Heiner's Syndrome). The national organization would primarily be a parental group interested in communication and optimizing the medical care for their children.

If you would be interested in participating in this new organization, contact:

Dorr G. Dearborn, Ph.D., M.D.
Pediatric Pulmonary Division
Case Western Reserve University, School of Medicine
10900 Euclid Avenue, BRB 824
Cleveland, Ohio 44106-4948

Back

ADULT HEALTH CONCERNS

If you have concerns about the health of adults who have been exposed to Stachybotrys, contact the Occupational Medicine physician listed below:

Eckardt Johanning, MD, MSc

Eastern New York Occupational Health Program

Back

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Fact sheets and other indoor air quality related publications including "Biological Pollutants in Your Home" and "Flood Cleanup: Avoiding Indoor Air Quality Problems" are available from:

Indoor Air Quality Information Clearinghouse

P.O. Box 37133

Washington, D.C. 20013-7133

(800) 438-4318 or (202) 484-1307

Should You Have the Air Ducts in Your Home Cleaned?

Also visit the web site of U.S. Environmental Protection Agency, Indoor Environments Division

<http://www.epa.gov/iaq/>

Back

Questions about stachybotrys or any topic mentioned on this home page should be directed to stachy@po.cwru.edu.

This page is maintained by Sheree Hemphill, sah18@po.cwru.edu.

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January 17, 1997 / 46(02);33-35

Update: Pulmonary Hemorrhage/Hemosiderosis Among Infants -- Cleveland, Ohio, 1993-1996

In November 1994, private physicians and public health officials in Cleveland, Ohio, and CDC reported a cluster of eight cases of acute pulmonary hemorrhage/ hemosiderosis that had occurred during January 1993-November 1994 among infants in one area of the city (1). Two additional cases were identified in December 1994. All 10 infants lived within seven contiguous postal tracts in eastern metropolitan Cleveland. Pulmonary hemorrhages recurred in five of the infants after they returned to their homes shortly after hospital discharge; one infant died as a result of pulmonary hemorrhage. This report summarizes the findings of the follow-up investigation, including a case-control study and an assessment by the county coroner of cases of infant death. These findings documented an association between acute pulmonary hemorrhage/hemosiderosis in this cluster of cases and mold growth in their water-damaged homes. Case-Control Study of Risk Factors for Pulmonary Hemorrhage

To determine risk factors for acute pulmonary hemorrhage among the infants in the cluster, the Rainbow Babies and Childrens Hospital (RBCH), the Cuyahoga County Board of Health, the Cleveland Department of Public Health, and CDC conducted a case-control study. A case was defined as an episode of acute, diffuse pulmonary hemorrhage of unknown etiology during the first year of life in a previously healthy infant that required hospitalization at RBCH during January 1993-December 1994. The study compared 10 case-infants with 30 age-matched control infants from the same area in Cleveland (2).

Of the 10 case-infants, nine were male; in comparison, of the 30 controls, 15 (50%) were male (p less than 0.05). Breastfeeding was reported for none of the case-infants but for 11 (37%) of the controls (odds ratio {OR}=0.2; 95% confidence interval {CI}=0-1.2). In addition, nine of 10 case-infants and 16 (53%) of 30 controls resided in households with smokers (OR=7.9; 95% CI=0.9-70.6). All 10 case-infants and seven (23%) of the 30 controls resided in homes where major water damage (as a result of chronic plumbing leaks or flooding) had occurred during the previous 6 months (OR=16.3; 95% CI=2.6-infinity). The latter finding prompted a visual inspection and quantitative air sampling for and microscopic identification of fungi in the study homes. The quantity of fungi, including the toxigenic fungus *Stachybotrys atra* (whose toxins have been implicated in hemorrhagic disorders in animals), was higher in the homes of case-infants than in those of controls (OR=1.6; 95% CI=1.0-30.8).

Active surveillance by the RBCH identified an additional 11 cases of acute pulmonary hemorrhage/hemosiderosis among infants in the Cleveland area during January 1995-December 1996. Of these 11 infants, two had died as a result of acute pulmonary hemorrhage. The demographic characteristics and clinical presentation of these 11 cases was consistent with the initial cluster of cases.

Based on the findings of the case-control study, health authorities in Cleveland recommended prompt clean-up and disposal of all moldy materials in the water-damaged homes and have designed a prevention program focusing on water-damaged homes. Coroner's Investigation of Infant Deaths

The three infant deaths resulting from pulmonary hemorrhage prompted the county coroner to re-examine all infant deaths in Cuyahoga County during January 1993-December 1995 to determine whether cases of pulmonary hemorrhage had been misclassified. Postmortem examinations were reviewed for all 172 infants who died in the county during that period, including 117 deaths attributed to SIDS; premature infants who died in a hospital were excluded. Pathologic lung specimens were sectioned, stained with Prussian blue, and screened for the presence of hemo-siderin.

Extensive hemosiderin-laden macrophages were present in lung tissue of nine (5%) infants -- a finding indicating major pulmonary hemorrhage preceding death. Of these nine deaths, two resulted from homicide, and one had a recent history of child abuse. No apparent etiologies for pulmonary hemorrhage/hemosiderosis were identified for the other six infants presumed to have died from SIDS, all of whom had lived in the same postal tracts as the initial cluster; three were male, and two were siblings. A review of the clinical circumstances for five infants indicated that some symptoms of pulmonary hemorrhage had been present before death: two infants had had episodes of epistaxis or mild hemoptysis within 7 days before death, and four had had additional symptoms (e.g., cough, pulmonary congestion, or black stools).

Reported by: DG Dearborn, MD Infeld, PG Smith, LJ Brooks, C Carroll-Pankhurst, R Kosick, BB Dahms, Rainbow Babies and Childrens Hospital; EK Balraj, R Challener, Cuyahoga County Coroner's Office; TM Allan, TE Horgan, Cuyahoga County Board of Health; R Staib, C Wallace, Cleveland Dept of Public Health; TJ Halpin, MD, State Epidemiologist, Ohio Dept of Health. BB Jarvis, Univ of Maryland, College Park. JD Miller, Agri-Canada, Ottawa, Ontario. Air Pollution and Respiratory Health Br, Div of Environmental Hazards and Health Effects, National Center for Environmental Health, CDC.

Editorial Note

Editorial Note: The findings of the investigation described in this report suggest that, in Cleveland, the infants with pulmonary hemorrhage were more likely than controls to reside in homes that had been affected by major water damage during the previous 6 months. The water damage may have promoted the growth of fungi, including *S. atra*. Because *S. atra* requires water-saturated cellulose-based materials for growth in buildings, it is considered uncommon in homes. Although *S. atra* has been associated with gastrointestinal hemorrhaging in animals that had consumed moldy grain (3), the fungus previously has not been associated with disease in infants.

SIDS is diagnosed only after exclusion of other known causes of death. The review by the Cuyahoga County coroner indicated that some infant deaths initially attributed to SIDS actually resulted from pulmonary hemorrhage. Agonal alveolar hemorrhage may occur in approximately two thirds of infant autopsies (4); however, the presence of extensive hemosiderin-laden macrophages within the alveoli indicates major predeath pathologic processes, which precludes the diagnosis of SIDS. Macrophages require approximately 48 hours to convert the iron of the ingested erythrocytes into hemosiderin; therefore, the presence of hemosiderin-laden macrophages in alveoli indicates alveolar bleeding for at least 2 days preceding death (5). Causes of such bleeding and pulmonary hemosiderosis may include cardiac lesions associated with increased left atrial pressure, trauma, pneumonia, and perhaps suffocation.

The findings of this investigation -- including the association of environmental factors with pulmonary hemorrhage/hemosiderosis and the presence of extensive hemosiderin-laden macrophages in some infants with SIDS -- underscore the need for further investigation of these relations. In particular, further efforts are needed to clarify the association between pulmonary hemorrhage in infants and exposure to water-damaged building materials and to evaluate pathologic methods to identify and quantify pulmonary hemorrhage and hemosiderosis.

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Indoor Air Quality Survey Report

Delivery Order Number MDA946-00-D-0001 - Log Number 0028
Applied Environmental Reference Number 910-99-0633

December 17, 1999

Submitted to: DOD, WHS, RE & F/SEMD/SOHB
Room 2D533
Attn: Michael Langone, Chief, Safety & Occupational Health
Pentagon
Washington, D.C. 20301-1155

Introduction

Applied Environmental, Inc. conducted an Indoor Air Quality (IAQ) survey within a 9th floor conference room and adjacent offices in the Skyline 5 office building, located at 5111 Leesburg Pike, Falls Church, Virginia. The survey was performed on December 2 and 3, 1999, and consisted of direct-reading measurement of carbon monoxide (CO), carbon dioxide (CO₂), temperature, and relative humidity. These parameters were also logged continuously during a 24-hour period. Air flow measurements were conducted at each supply and return diffuser, and a diagram of the room was prepared in accordance with the scope of work. Air sampling for total bacteria and fungi was performed, and sampling for air and surface bacteria and fungi was also performed in several locations.

Industrial hygiene air testing was accomplished in accordance with procedures established by the American Industrial Hygiene Association (AIHA), The Occupational Safety and Health Administration (OSHA) the National Institutes for Occupational Safety and Health (NIOSH) and the American Conference of Governmental Industrial Hygienists (ACGIH), as well as current industry standards. An assessment of the collected data was also made in accordance with non-regulatory standards for IAQ developed by American Society of Heating, Refrigeration, and Air Conditioning Engineers, as appropriate.

An air quality profile was performed in 5 locations within the room. Sampling was also performed outdoors for comparison purposes. Reference levels, sampling methodologies and equipment specifications for the instruments used during the survey are attached to this report as Appendix A.

Executive Summary

As a result of the survey, the relative humidity measurements were found to be below the ASHRAE-recommended comfort range and below the less stringent range recommended in the OSHA Technical Manual in all sampling locations. Temperature, carbon monoxide and carbon dioxide concentrations were in acceptable ranges.

Good air flow was observed within the room. Black particulate was observed on return air grilles within the survey area.

Air and surface sampling indicated the presence of *Stachybotrys chartarum* in several of the sampling locations including the return air plenum. Continuing water incursion is reported into the space, and signs of the partial removal of wet and water-damaged building materials were evident.

Survey Results

The sampling locations and the results of the measurements collected during the survey are presented in the following data table. The data-logging information for the conference room is included as an attachment for your reference. The comparison criteria for each sampling parameter are presented in Appendix A.

Location	Time	Temperature (°F)	Relative Humidity (%)	Carbon Dioxide (ppm)	Carbon Monoxide (ppm)
Outside, Entrance to Parking Garage	9:50 a.m.	42.9	37.2	544	1
	3:30 p.m.	53.9	15.4	436	0
9 th Fl. Conference Room	10:39 a.m.	68.9	19.3	751	0
	2:50 p.m.	74.6	13.6	579	0
9 th Fl. Room 9182	10:59 a.m.	69.3	18.5	652	0
	2:55 p.m.	74.5	13.4	577	0
9 th Fl. Room 9113	11:15 a.m.	70.0	17.2	672	0
	2:58 p.m.	74.9	13.8	600	0
9 th Fl. Corridor at Entrance to Conference Room	11:17 a.m.	70.5	17.9	658	0
	3:02 p.m.	72.4	14.9	600	0
9 th Fl. Room 9112	11:20 a.m.	72.4	16.9	604	0
	3:06 p.m.	72.4	13.3	527	0

During the data-logging period in the conference room, the average carbon dioxide concentration measured 548 ppm. The average temperature was 69.9°F, with relative humidity averaging 17.6%. The maximum carbon monoxide concentration measured 1 ppm.

The relative humidity measurements were below the ASHRAE recommended comfort range and the range recommended in the OSHA Technical Manual in all sampling locations. Diminished relative humidity is not uncommon in the Washington, D.C. metropolitan area during the heating season. Temperature measurements were within the recommended range in all sampling locations.

Carbon dioxide measurements were below the recommended maximum guidelines in all sampling locations. Carbon monoxide measurements were well below regulatory limits and industry exposure guidelines in all sampling locations.

The laboratory results of the bacterial and fungal air and surface sampling are presented in the following table.

Sampling Location	Sample Type	Result	Organisms Isolated
JADD991202 - 1 9 th FL Conference Room, on table	Bacteria, Air, ID 1	7 cfu/m ³	Bacillus species (100%)
JADD991202 - 1 9 th FL Conference Room, on table	Fungi, Air, ID 1	63 cfu/m ³	Stachybotrys chartarum (atra) (44%)
JADD991202 - 2 9 th FL Conference Room, in Return Air Plenum	Bacteria, Air, ID 1	21 cfu/m ³	Coagulase-negative Staphylococcus (67%)
JADD991202 - 2 9 th FL Conference Room, in Return Air Plenum	Fungi, Air, ID 1	150 cfu/m ³	Stachybotrys chartarum (atra) (71%)
JADD991202 - 3 9 th FL Room 9182	Bacteria, Air, ID 1	14 cfu/m ³	Coagulase-negative Staphylococcus (50%)
JADD991202 - 3 9 th FL Room 9182	Fungi, Air, ID 1	56 cfu/m ³	Stachybotrys chartarum (atra) (13%)
JADD991202 - 4 9 th FL Room 9112	Bacteria, Air, ID 1	77 cfu/m ³	Micrococcus species (45%)
JADD991202 - 4 9 th FL Room 9112	Fungi, Air, ID 1	56 cfu/m ³	Penicillium species (38%)
JADD991202 - 5 Outside	Bacteria, Air, ID 1	35 cfu/m ³	Coagulase-negative Staphylococcus (60%)
JADD991202 - 5 Outside	Fungi, Air, ID 1	290 cfu/m ³	Cladosporium species (64%)
JADD991129 - 6 Blank	Bacteria, Air, ID 1 Fungi, Air, ID 1	No Growth	
JADD991202 - 7 9 th FL Conference Room, Window Ledge	Bacteria, Wipe, ID1	20 cfu/in ²	Bacillus species (100%)
JADD991129 - 7 9 th FL Conference Room, Window Ledge	Fungi, Wipe, ID 1	No Growth	
JADD991202 - 8 9 th FL Conference Room, Top of Light Fixture	Bacteria, Wipe, ID1	Unable to quantitate due to heavy fungal growth	Bacillus species (85%)
JADD991129 - 8 9 th FL Conference Room, Top of Light Fixture	Fungi, Wipe, ID 1	420 cfu/in ²	Penicillium species (51%)
JADD991202 - 9 9 th FL Conference Room, Top of Gypsum Ceiling Tile	Bacteria, Wipe, ID1	Confluent Growth, Unable to quantitate	Bacillus species (98%)
JADD991129 - 9 9 th FL Conference Room, Top of Gypsum Ceiling Tile	Fungi, Wipe, ID 1	140 cfu/in ²	Stachybotrys chartarum (atra) (35%)

JADD991202 - 10 9 th Fl. Room 9182, Window Ledge, Center	Bacteria, Wipe, ID1	5 cfu/in ²	Bacillus species (100%)
JADD991202 - 10 9 th Fl. Room 9182, Window Ledge, Center	Fungi, Wipe, ID 1	15 cfu/in ²	Stachybotrys chartarum (atra) (93%)
JADD991202 - 11 9 th Fl. Room 9112, Window Ledge, Mud Spot	Bacteria, Wipe, ID1	No Growth	
JADD991202 - 11 9 th Fl. Room 9112, Window Ledge, Mud Spot	Fungi, Wipe, ID 1	No Growth	
JADD991202 - 12 Blank	Bacteria, Wipe, ID 1 Fungi, Wipe, ID 1	No Growth	

22
23

The presence of *Stachybotrys chartarum* in the air samples collected indicates that water incursion into the space has been prolonged, and that conditions for amplification are likely to be present. The presence of spores on several surfaces throughout the area including the return air plenum indicates that dissemination of the *Stachybotrys* organisms is likely to be extensive, and is likely to have been caused by airflow dynamics within the space as well as through physical disturbance during the removal of water damaged building materials.

Identification of *Stachybotrys chartarum* can occur when organic building materials become wet and stay wet for extended periods of time. The fact that this fungus was identified in the wipe samples and in the air is cause for concern, because the airborne fungus can result in exposures when inhaled by the building occupants.

Stachybotrys chartarum is most commonly grows on damp cellulose, and is found in high concentrations in agricultural products such as hay or straw. In indoor environments, it is found in areas with severe water leaks, and grows readily on the paper backing component of gypsum wallboard in wall cavities and in other environments where conditions for growth are suitable. *Stachybotrys chartarum* has been recently implicated in an outbreak of pulmonary hemorrhage in infants in the Cleveland area in flooded homes. *Stachybotrys chartarum* produces strong mycotoxins (toxic byproducts given off during growth). These mycotoxins has been loosely associated with adverse health effects including contact irritation that can lead to mucous membrane irritation including sore throat and irritation of the conjunctiva around the eye, cough, rhinitis, burning sensations in the mouth, throat, and nasal passages, and cutaneous (skin) irritation at the points of toxin contact. Nosebleeds are also common, and tracheal bleeding has been occasionally reported.

Stachybotrys is relatively difficult to isolate in air samples using regular nutrient media as was used in this survey. As a result, the number of airborne spores which did not result in viable colonies (and were not counted in the results) was most likely higher than the sampling results indicate. This is significant as non-viable spores can be as irritating as viable spores.

The laboratory data sheets are attached for your reference.

Recommendations

Based upon the sampling results and upon observations made while on-site, the following recommendations are provided:

1. The presence of *Stachybotrys chartarum* within the wipe samples and air samples collected indicates the presence of excessive moisture in the building. It is imperative that the source of water incursion be identified, and the water prevented from entering the building envelope. An assessment must also be performed to identify the extent and locations of contamination of building materials with *Stachybotrys chartarum*. Porous building materials that are or have been wet should be removed and discarded, and non-porous materials should be thoroughly cleaned and disinfected. It is strongly recommended that the assessment and any remedial activities be performed in such a manner as to avoid further dissemination of the *Stachybotrys chartarum* organisms identified during the sampling.
2. Strong consideration should be given to performing assessment and remedial activities during off-hours or at a time when the affected areas are unoccupied to minimize the potential for building occupants to be exposed to *Stachybotrys chartarum*. Applied Environmental, Inc., will provide any technical assistance you require in performing an appropriate assessment of the building, and can provide further information, a remediation work plan, and a list of recommended contractors experienced in remediating *Stachybotrys* contamination in commercial office buildings.
3. Humidity control may be desirable through the use of portable humidifiers if occupant discomfort is severe. If used, caution must be exercised in the maintenance, cleaning, and disinfection of the units since they are frequently sources of microbial bioamplification indoors.



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ATTACHMENT A

COMPARISON CRITERIA FOR INDOOR AIR QUALITY PARAMETERS

Carbon Dioxide

Carbon dioxide (CO₂), a product of combustion and human respiration, is a commonly used indicator of overall air quality and ventilation rates within an occupied building. The levels found in buildings are primarily a function of the rate and amount of outside air delivery to the occupied space, the effectiveness of air distribution within the space, and the occupancy (number of people and activity) of the space. It is generally accepted that an inadequate outside air supply may cause problems such as headaches and respiratory difficulties, due to a general build-up of non-specific contaminants and odors. These symptoms are typically categorized as "Sick Building Syndrome."

ASHRAE has published a recommended guideline of 1,000 ppm of CO₂ as the maximum limit for acceptable air quality in the document, *ASHRAE 62-1989, Ventilation for Acceptable Air Quality*. According to the American Society for Testing and Materials' (ASTM) *Provisional Standard Guide for Using Indoor Carbon Dioxide Concentrations to Evaluate Indoor Air Quality and Ventilation*, (PS 40-95), the 1,000 ppm guideline is based upon an indoor to outdoor differential of 650 ppm and assumes an outdoor CO₂ concentration of 350 ppm. At a differential higher than 650 ppm, 80% of unadapted individuals (visitors) would find air quality unacceptable (based upon non-specific contaminants, such as body odor and other bioeffluents).

According to the *OSHA Technical Manual, Chapter 6 - Indoor Air Quality Investigation* (a non-regulatory guidance document issued by OSHA Instruction CPL-2-2.20B, CH-1, November 13, 1990, for OSHA personnel conducting field surveys), NIOSH has published the following guidelines for indoor levels in the document, *Guidance for Indoor Air Quality Investigations, 1987*:

- | | |
|------------------|--|
| • 250-350 ppm | Normal Ambient Outdoor Concentrations |
| • 600 ppm | Minimal Air Quality Complaints |
| • 600 - 1000 ppm | Less Clearly Interpreted |
| • 1,000 ppm | Indicates inadequate ventilation and complaints such as Headaches, fatigue, and eye and throat irritation will be more widespread; 1000 ppm should be used as an upper limit for indoor levels |

These levels are only guidelines. If carbon dioxide levels exceed 1000 ppm it does not necessarily indicate that the building is hazardous and should be evacuated. Rather this level should be used as a guideline that helps maximize comfort for all occupants."

Carbon Monoxide

Carbon monoxide is a colorless, odorless, and tasteless gas that is formed during the combustion of hydrocarbon fuels. It is often introduced into buildings from outdoor sources (loading docks, vehicles) by way of the ventilation system, or from indoor sources (fireplaces and improperly vented combustion appliances). Carbon monoxide is a chemical asphyxiant to humans; when inhaled it combines with the hemoglobin of the blood to form carboxyhemoglobin (COHb), inhibiting oxygen transportation to the brain, heart, and other body parts. Prolonged exposure to CO can cause hypoxic stress in healthy individuals, and severe heart, brain, and circulatory damage, or death with sufficient exposure.

The diagnosis of carbon monoxide intoxication depends primarily on the demonstration of significantly increased COHb in the blood. While the reaction to a given blood level is extremely variable, levels over 60% are usually fatal; 40% is associated with collapse and syncope; between 15 and 25% there may be headache and nausea. The blood levels of cigarette smokers contain 3 to 10% COHb (with an average of 5.9% if a pack a day is smoked). By comparison, unexposed individuals have an average level of 1% COHb.

The current OSHA Permissible Exposure Limit (PEL) for carbon monoxide is 50 ppm for an eight-hour Time Weighted Average (TWA). OSHA has proposed a revised TWA exposure limit of 35 ppm and a ceiling level of 200 ppm, with an Immediately Dangerous to Life and Health (IDLH) level of 1,500 ppm.

The ASHRAE guideline for CO is 9 ppm as an eight-hour time weighted average, or 35 ppm as a one-hour average, according to ASHRAE 62-1989.

Temperature and Relative Humidity

The standard *ASHRAE 55-1981, Thermal Environmental Conditions for Human Occupancy*, recommends that indoor temperatures be maintained between 74°F and 79°F during the summer/transitional season and between 68°F and 76°F during the winter/transitional season, with relative humidity between 30% and 60%. These values are considered acceptable ranges of operative temperature and humidity for persons wearing typical light clothing and engaged in light activity, such in a typical office setting. The standard is considered to have been met if 80% of the building occupants are satisfied.

The ideal comfortable relative humidity range has been reported by ASHRAE to be 40% to 60%, as long as building materials or contents are not adversely affected. OSHA recommends humidity control within a 20% to 60% range in their technical manual for indoor air quality investigations. Low relative humidity can result in eye irritation and complaints of nose and throat discomfort in some individuals. In addition, irritated mucous membranes can predispose susceptible individuals to the effects of certain chemical and microbiological air contaminants. Sustained high humidity levels (over 70%) can promote the growth of microorganisms on building surfaces and furnishings and cause or contribute to microbial IAQ problems.

The Washington, D.C. metropolitan area commonly experiences hot summers with high humidity, and cold winters with very low humidity. Excessive humidity is typically controlled indoors by the air-conditioning system, and is generally within the referenced comfort ranges during the cooling season. Low indoor humidity levels in the winter are caused by drawing low-humidity outdoor air into the HVAC system, and heating it to the desired comfort level. This heating process drives moisture out of the conditioned air, commonly resulting in depressed humidity levels indoors during the heating season.

Target operating temperatures in commercial buildings in the Washington, D.C. metropolitan area are from 71°F to 73°F, with indoor relative humidity levels ranging from approximately 35% to 55% during the cooling season and from 20% to 40% during the heating season.

Microbial - General Guidelines

Microorganisms and other biological contaminants have been associated with various allergic responses including asthma attacks, hypersensitivity responses (hypersensitivity pneumonitis, humidifier fever, allergic rhinitis etc.) and illnesses such as legionellosis, Legionnaire's disease, and Pontiac Fever. Symptoms can include chills, fever, muscle aches, chest tightness, headache, cough, sore throat, diarrhea, and nausea. Sources of microbial contaminants can include air handling system condensate, cooling towers, water-damaged building materials, high indoor humidity, damp organic materials, and porous wet surfaces. The presence of moisture or water in combination with organic materials (e.g., building materials and dust or soil) can support the growth of microorganisms such as bacteria or fungi. Microbial contamination within a building ventilation system is also of concern due to the potential for the system to circulate microorganisms to non-source areas (e.g., areas without water damage or reservoirs).

The ACGIH *Bioaerosols, Assessment and Control* provides guidance on investigation, sampling, assessment, and remedial actions. This document identifies microorganisms currently associated with Building Related Illness (BRI), but does not provide any criteria for acceptable airborne concentrations or surface contamination levels. Emphasis is placed on identification of species, conditions found at the site, and symptoms reported by the affected individuals. "ACGIH does not support any existing numerical criteria for interpreting data on biological agents from source or air samples in non-manufacturing environments."

There are no federal OSHA standards regulating exposure to microorganisms in the work place. The OSHA *Technical Manual, Chapter 6 - Indoor Air Quality Investigation, issued by OSHA Instruction CPL-2-2.20B, CH-1, November 13, 1990*, provides a value of 1,000 viable Colony Forming Units per cubic meter of air (CFU/M³), 1,000,000 CFU/gram of fungi in dust or material, and 10,000 CFU/milliliter of stagnant water or slime as contamination indicators.

No contamination indicator is provided for surface or wipe sampling concentrations. Wipe sampling is commonly performed to evaluate the degree of surface contamination. Although the analysis can be reported as a concentration referencing quantity per area, the result is generally considered an empirical or qualitative value. An affirmative outcome is simply an indicator that maintenance may be required to maintain surface cleanliness. There is no regulatory threshold for microbial wipe samples. Therefore, specific values should take into account sound professional judgment and recommended guidelines of research and public health institutions when evaluating the significance of the analytical results. Careful consideration should also be given when assessing the magnitude of the value, keeping in mind comparative outdoor species, contaminant dispersion, and the toxicity of the microorganism isolated.

It should be noted that levels in excess of these concentrations do not necessarily imply that the conditions are unsafe or hazardous. A determination of the types and concentrations of airborne microorganisms is necessary to fully evaluate the hazard to employees. However, as previously indicated, this level does not correlate directly with airborne levels that are of health concern because of the wide variety of microorganisms that can be found in buildings. In several cases where a large number of people have exhibited illnesses that were associated with microbial exposure, the levels of bacteria and fungi have usually been more than 2,000 CFU/M³ of air. It should be noted that during growing seasons, outdoor fungal spore levels can range from 1,000 CFU/M³ to 100,000 CFU/M³ of air.

Adverse health effects associated with exposure to microbial organisms are a function of many factors, of which concentration and the type of organism, are major considerations. In most cases where the airborne concentration of viable microbes is low, adverse health consequences of exposure to bioaerosols are observed only in hypersensitive individuals, such as persons with known allergy histories, or in individuals with compromised immune systems. When present, the reactions of such individuals tend to

become more severe with increasing exposure in terms of the concentration of the microbial contaminant and/or the duration of exposure.

In assessing potential microbial exposures, it is important to note that individual microbial measurements provide a limited view of true exposure due to the fact that levels can fluctuate widely over time and under varying conditions. In addition, generally available microbial monitoring procedures measure viable organisms only. Dead cells and cell fragments, proteins, metabolites and volatile organic compounds produced by microbes, may also be responsible for adverse health effects.

Confirmation of actual health effects resulting from exposure to a microbial agent, in such cases as BRI or Legionnaires' disease, must be based on medical findings in conjunction with survey test results.

Direct Reading Measurements

The CO₂ measurements were made with a portable CO₂ indicator manufactured by Metrosonics, Inc. For this unit, the principle of operation for CO₂ measurements is non-dispersive infrared spectrophotometry. The unit has an accuracy tolerance within $\pm 3\%$ of full scale (5,000 parts per million (ppm) at 25°C) and a resolution limit of 1 ppm. It is capable of providing real-time CO₂ concentration with a range of operation from 0 to 5,000 ppm. The Metrosonics unit also measures ambient temperature with a usable range of 32°F to 140°F with an accuracy of $\pm 0.9^\circ\text{F}$. Ambient relative humidity is measured from 0% to 100% relative humidity with an accuracy of $\pm 3\%$ at 25°C.

The CO measurements are made with a selective electrochemical CO sensor installed into the Metrosonics unit. The CO sensor has an accuracy (at 25°C) of better than $\pm 3\%$ of reading or ± 2 ppm (whichever is greater). The unit is capable of providing real-time CO concentrations during the sampling period with a range of operation of 0 to 1,000 ppm.

Respirable particulate measurements are made with a Handheld Aerosol Monitor manufactured by ppm, Inc. The operation of this direct-reading instrument is based on the scattering of light (photometry), which is subsequently related to mass concentration. The unit will measure particles between 0.02 and 20 micrometers. Its highest sensitivity is between approximately 0.1 and 10 micrometers. Concentrations from 0.001 to 200 milligrams per cubic Meter (mg/M³) can be measured. Measurements are converted to micrograms per cubic meter ($\mu\text{g}/\text{M}^3$) for comparison to industry guidelines.

Ventilation measurements were made at accessible components using a factory calibrated Alnor Balometer, Model 6463 and a Velometer, Series 6000, in accordance with standard industrial hygiene/engineering protocols. The Balometer can measure volumetric airflow from 0 CFM to 2000 CFM, with an accuracy of $\pm 3\%$ of full scale, except above 1,300 CFM on exhaust flow from base to hood, which is $\pm 4\%$ of full scale. The unit read-out time is approximately 4 seconds, and it has an operable temperature range from 32-122°F. The unit can measure standard diffuser openings of 2'x 2', 2'x 4' and 1'x 4'. The Velometer can measure air velocities inside heating and ventilating ducts, or in open areas such as fume hoods, grilles, diffusers, slots on ventilated plating tanks, etc. The Velometer can measure air velocity in feet/minute from 0 FPM to 10,000 FPM, with an accuracy of $\pm 2\%$ of full scale. The unit can measure static pressure from 0 to 3.0 inches of water (0 to 75 mm), with an accuracy of $\pm 5\%$ of full scale. The unit is operable to 250°F. Air velocities may be calculated to volumetric measurements by multiplying the velocity measurement by a manufacturer's constant for each type of diffuser.

The criteria used to evaluate the survey results include standards and guidelines referenced by the Occupational Safety and Health Administration (OSHA), the American Society for Heating, Refrigerating, and Air-Conditioning Engineers, Inc. (ASHRAE), the American Conference of

Governmental Industrial Hygienists (ACGIH), the U.S. Environmental Protection Agency (EPA), the National Institute for Occupational Safety and Health (NIOSH), and other applicable industry guidelines.

Microbial Air and Surface Sampling

Microbial air samples are collected using a single-stage Andersen viable sieve impactor with the N6 stage. Air is drawn through the impactor using a precalibrated GAST electric high-volume sampling pump at a rate of 28.3 liters per minute. Trypticase soy agar media is used for bacterial samples and modified malt extract agar for fungal samples. Analyses of the microbial air samples were performed in accordance with standard medical/public health microbiological isolation and characterization techniques and NIOSH Method 501 (draft document). The samples were analyzed to identify the concentrations of viable bacterial and fungal organisms present in total Colony Forming Units per cubic Meter of air (CFU/M³).

The wipe samples are collected using *Culturette II* rayon-tipped sampling swabs and transport systems manufactured by Becton Dickinson Microbiology Systems. Each swab is used to wipe a known area of the surface to be sampled, and is then stored in a modified Stuart's bacterial transport medium during handling and transport to the laboratory. All samples were collected in accordance with protocols recognized by the American Conference of Governmental Industrial Hygienists (ACGIH), and were enumerated and identified using standard isolation and identification techniques. Sample results are provided as total counts of colony forming units (CFUs) per square inch of surface area for the wipe sample.

Microbial samples were analyzed by the Aerobiology Laboratory Division of Applied Environmental, Inc.



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ATTACHMENT B

DESCRIPTIONS OF SOME COMMON MICROBIAL ORGANISMS

The following list provides brief descriptions of some common microbial organisms:

Bacteria

Bacillus species

The *Bacillus* bacterium is an indicator that an outside source may be contributing to indoor contamination (e.g., water incursion, pipe and sewer leakage). *Bacillus* species (gram-positive) are common in many environments. The spore-forming (endospore) *Bacillus* can survive long periods of dryness, low or elevated temperatures, and other environmental conditions that would be fatal to most other bacteria. The EPA document ECAO-R-0315, *Indoor Air Assessment - Indoor Biological Pollutants*, states that as a generality, when *Bacillus* species are observed to be dominant in an indoor air environment in high concentrations, it is probable that environmental reservoirs are contaminated. Both the EPA and ACGIH documents identify *Bacillus* species as causing and/or suspected of causing outbreaks of hypersensitivity pneumonitis in the various cases investigated. *Bacillus* species are commonly isolated on interior components of building ventilation systems using outside air.

Coagulase negative *Staphylococcus*

Coagulase negative *Staphylococcus* is a normal inhabitant of the skin and nasal passages of humans, and is not expected to produce adverse health effects in normally healthy individuals.

Comamonas species

Comamonas species are mainly environmental, and reports of infection in humans are rare.

Corynebacterium species

Corynebacterium species are primarily parasites of the mucous membranes or skin of mammals, and are commonly found in occupied areas. Some species are pathogenic to mammals, although infection in humans is rare, and is usually only found in individuals with compromised immune systems. As such, they have not been associated with BRI.

Flavimonas oryzae

Flavimonas oryzae (previously named *Pseudomonas oryzae*) are environmental organisms found in water and soil and on plants including fruits and vegetables. They are distributed worldwide. Since they can survive in an aqueous environment, they are commonly isolated in clinical cultures. It is not uncommon to isolate them in indoor environments in which ground water leakage has occurred. When gram-negative rods become predominant indoors, it can be assumed that they have resulted from an environmental reservoir, rather than human host.

(gram-positive) sources. They can cause adverse health effects such as pneumonia in immunocompromised individuals

Micrococcus species

Micrococcus species are found in the skin and mucous membranes of humans, and are typically found indoors in occupied areas. They have not been associated with BRI.

Pseudomonas fluorescens/putida

These *Pseudomonas* are gram negative, non-enteric environmental organisms. It is not uncommon to find them outdoors on organic material, decaying leaves, etc. If present in large quantities indoors, they indicate an outdoor source with indoor amplification reservoir.)

Pseudomonas species occurs occasionally in the outdoor environment on leaf surfaces and is considered a rare inhabitant in the indoor environment. *Pseudomonas* has been associated with pneumonia, but usually afflicts only persons with debilitated immune systems. Bacteria found in the naturally occurring outdoor environment do not usually cause human illness unless they are selectively amplified in an indoor environmental reservoir or their products become airborne and successfully reach the breathing zone of susceptible humans. When gram-negative rods become predominant indoors, it can be assumed that they have resulted from an environmental reservoir, rather than human host (gram-positive) sources.

Rhodococcus species

The genus *Rhodococcus* includes a diverse group of organisms quite variable in morphology, growth patterns, biochemical characteristics, and capacity for causing disease. Organisms in this group are associated with a variety of environmental locations and especially with soil and farm animals. They have often been isolated from feces of herbivores and swine, with fecal contamination significantly increasing the organism's rates of multiplication in soil. They have also been isolated from fresh and marine waters and from the guts of some arthropods. Although members of the genus *Rhodococcus* are infrequently isolated from human clinical specimens, their increasing roles as opportunistic pathogens are becoming more apparent. Infection is typically limited to immunocompromised hosts, especially those with AIDS.

Shewanella species

Shewanella are primarily found in foodstuffs and the environment and only occasionally in human specimens and in clinical samples. *Shewanella putrefaciens* strains have been reported to cause lower limb cellulitis, otitis media, and septicemia.

Sphingomonas paucimobilis is also a gram negative rod, and was previously named as a *Pseudomonas*. (see *Pseudomonas* above)

Stenotrophomonas maltophilia

Previously known as *Xanthomonas maltophilia* and *Pseudomonas maltophilia*, this bacterium is ubiquitous in nature, and has also been isolated from the hospital environment. It is commonly isolated in the laboratory from environmental cultures, and has occasionally been associated with septicemia, pneumonia, wound infection, endocarditis, and meningitis in highly immunocompromised individuals (typically in intensive care units and on mechanical respirators).

Fungi

Alternaria species

The fungal species *Alternaria* is a worldwide outdoor mold that flourishes seasonally in warm and humid conditions. Colonies of *Alternaria* are found on textiles and fruits, especially tomatoes, and may be linked to Baker's asthma.

Aspergillus species, *Aspergillus niger*, *Aspergillus ochraceous*

Aspergillus is a fungal species which can cause a condition known as Hypersensitivity Pneumonitis syndrome (a lower lung, allergic-type condition) in susceptible individuals. Hypersensitivity Pneumonitis can occur in certain individuals who become "sensitized" to these organisms over a period of time. In most cases, adverse health consequences of exposure to these organisms are seen only in "hypersensitive" individuals. It has also been reported that non-viable cell products and VOCs are believed to be responsible for some adverse health effects. *Aspergillus niger* is considered an "opportunistic pathogen" (disease-causing agent). Normally, individuals have a high degree of immunity to this microbe. However, individuals whose immune systems are compromised by certain medical conditions are more susceptible to infection. The organism can cause a lung disease known as Aspergillosis (a fungal lung infection), and is the usual cause of a sinus infection known as otomycosis. *Aspergillus* is unique as it thrives in warm temperatures (>40°) and, therefore, its growth peaks with indoor heating (e.g., in autumn and winter). It is commonly culturable from house basements, bedding, house dust and raw textiles on upholstered furniture. Inhaled spores can lead to several well-defined diseases: allergic asthma, hypersensitivity pneumonitis, invasive aspergillosis, aspergilloma (fungus ball), and allergic bronchopulmonary aspergillosis.

Aureobasidium species

Aureobasidium are fungi that thrive in moist environments, and are considered common environmental contaminants. Typically, they are not associated with BRI, but can be linked to hypersensitivity pneumonitis in susceptible individuals.

Botrytis species

Botrytis is also an environmental fungal organism with no known adverse health effects. It is commonly isolated as a contaminant in environmental cultures.

Chaetomium species

Chaetomium species are found on a variety of substrates containing cellulose, including paper and plant compost. These fungi are commonly identified as contaminants in clinical cultures, and have been occasionally implicated as allergens.

Cladosporium species

The genus *Cladosporium* (also known as *Hormodendrum*) is the most commonly isolated fungus in the world, and is composed of 25 different species of mold that thrive in temperate zones throughout the world. Rain drops or moisture liberate spores from decaying leaves, which go on to produce velvety olive green, brown or greenish-grey colonies. *Cladosporium* can readily be detected in homes with poor ventilation and around painted areas of moist window frames. Their spores have been found in some face creams, paints, commercial soil and textiles. *Cladosporium* spores can survive under refrigeration. Patients are commonly assessed for *Cladosporium* sensitivity using extracts from spores and mycelia of *Cladosporium herbarum*. *Cladosporium* species flourish outdoors, and are commonly found in indoor office environments and within air handling systems that introduce outside ventilation air to their buildings.

***Geotrichum* species**

Geotrichum species can cause geotrichosis, which is a rare infection that is known to have produced lesions in the lungs, mouth, intestines, vagina, and skin. Fungemia and disseminated infections have also been reported. *Geotrichum* is found as normal flora in humans and seems to cause disease only in compromised hosts.

***Hyalodendrum* species**

Hyalodendron species are fungi similar to *Cladosporium* which are commonly found outdoors on decaying wood and other organic materials. They are non-pathogenic in humans.

***Mucor* species**

Mucor species are fungi that are commonly found as contaminants in environmental cultures. They are occasionally associated with zygomycosis, predominantly in patients who are predisposed to disease by diabetes, immunosuppression, AIDS, severe burns, intravenous drug use, and malnutrition. Mucoracious species quickly cover agar surfaces with fluff resembling cotton candy. This frequently causes other organisms on a culture plate to become obscured, and therefore unable to be quantified.

***Penicillium* species**

Penicillium species are widespread in nature being found on fruits, vegetables, and other substrates that may provide nutriment. The *Penicillium* species can cause a condition known as Hypersensitivity Pneumonitis syndrome (a lower lung, allergic-type condition) in susceptible individuals. Hypersensitivity Pneumonitis can occur in certain individuals who become "sensitized" to the organism over a period of time. In most cases, adverse health consequences of exposure to this organism are seen only in "hypersensitive" individuals or those with compromised immune systems. It has also been reported that non-viable cell products and VOCs are believed to be responsible for some adverse health effects. The reference, Medically Important Fungi by D. Larone, Ph.D., states that *Penicillium* species are found in a variety of diseases in which its etiologic significance is uncertain. *Penicillium* has been known to cause keratitis (inflammation of the cornea) and external ear infections. Some strains of *Penicillium* produce toxins.

***Phoma* species**

Phoma species, are commonly considered to be environmental fungal contaminants. They are occasional agents of phaeohyphomycosis, but are not typically associated with BRI.

***Rhizopus* species**

Rhizopus species have been found to be etiologic agents of zygomycosis, predominantly in clinical patients who are predisposed to disease by diabetes, immunosuppression, AIDS, severe burns, intravenous drug abuse, malnutrition, etc. They are commonly isolated as environmental contaminants in laboratory cultures, and quickly cover agar surfaces with dense growth.

***Rhodotorula* species**

Rhodotorula species is a yeast-like fungus that is commonly isolated as a contaminant in clinical laboratory cultures. It occurs on damp organic materials and is found outdoors in temperate regions. It is not uncommon to find this organism in HVAC systems in buildings using outdoor air in their ventilation systems. It can infect particularly susceptible individuals during the terminal stages of debilitating diseases such as carcinoma and bacterial endocarditis.

***Stachybotrys* species**

Identification of *Stachybotrys chartarum* can occur when organic building materials become wet and stay wet for extended periods of time. The fact that this fungus was identified in the air is

cause for concern, because the airborne fungus can result in exposures leading to adverse health effects when inhaled by building occupants.

Stachybotrys chartarum most commonly grows on damp cellulose, and is found in high concentrations in agricultural products such as hay or straw. In indoor environments, it may be found in areas with severe water leaks, and grows readily on the paper backing component of gypsum wallboard in wall cavities and in other environments where conditions for growth are suitable. It can also enter buildings from outdoor sources such as occupants and ventilation systems utilizing outside air for ventilation. *Stachybotrys chartarum* has been recently implicated in an outbreak of pulmonary hemorrhage in infants in the Cleveland area in flooded homes. *Stachybotrys chartarum* produces strong mycotoxins (toxic byproduct given off during growth). These mycotoxins have been linked to adverse health effects including contact irritation that can lead to mucous membrane irritation including sore throat and irritation of the conjunctiva around the eye, cough, rhinitis, burning sensations in the mouth, throat, and nasal passages, and cutaneous (skin) irritation at the points of toxin contact. Nosebleeds are also common, and tracheal bleeding has been occasionally reported.

Sterilia mycelia

Sterilia mycelia are fungal organisms that do not sporulate, and are therefore non-reproductive. Sterile hyphae are molds that do not produce conidia (spores), and that are not able to be speciated as a result. They are non-pathogenic to humans, and have not been implicated in BRI.

Ustilago species

Ustilago species are fungi that are parasitic on the seeds and flowers of many cereals and grasses, and are commonly isolated as contaminants in environmental cultures. They are seldom implicated in human disease, but may be inhaled and subsequently isolated from sputum specimens.

Yeast

Yeasts are the most common fungi isolated in the clinical laboratory. They are ubiquitous in the environment and also live as normal inhabitants in our bodies. Yeasts are considered to be opportunistic pathogens, causing disease in patients with compromised immune systems, with intravascular catheters, with diabetes mellitus, intravenous drug abusers, and those on extended antibiotic treatments. They may be allergenic to susceptible individuals if present in sufficient quantities.

Thermophilic actinomycetes

***Thermoactinomyces* species, *Saccharopolyspora* species**

Spores or cellular fragments of these organisms can become airborne and may be inhaled following mechanical disturbances of materials containing them. As a consequence, they often induce hypersensitivity pneumonitis, resulting in a process called "farmer's lung disease." There is little or no evidence that these thermophilic actinomycetes cause an actual infectious process, even though they are capable of growing at 37°C.

METROSONICS aq-501 SN 1414 V2.1 07/92

REPORT PRINTED 12/08/99 AT 08:04:55

PERIOD: 1 minute sample

ALARM LOGGING STATUS: Off

Filename.....5011

Test Location.....Skyline 5

Employee Name.....9th Floor Conference Room

Employee Number...910-99-0633-0028

Department.....November 2 and 3, 1999

Comment Field 1...DECEMBER

Comment Field 2...

Numeric Code #1... #2... #3... #4... #5...

-- OVERALL STATISTICS FOR TEST NUMBER 1 --

TEST STARTED 12/02/99 AT 15:14:25

TEST DURATION: 0 DAYS 20:13:04

CARBON DIOXIDE:

ALARMS: LOWER: 0 ppm UPPER: 5000 ppm
MINIMUM: 468 ppm OCCURRED 12/02/99 AT 20:55:25
AVERAGE: 548 ppm
MAXIMUM: 734 ppm OCCURRED 12/03/99 AT 10:41:25

TEMPERATURE:

ALARMS: LOWER: 32.0 degF UPPER: 140.0 degF
MINIMUM: 68.6 degF OCCURRED 12/02/99 AT 21:39:25
AVERAGE: 69.9 degF
MAXIMUM: 76.4 degF OCCURRED 12/02/99 AT 15:23:25

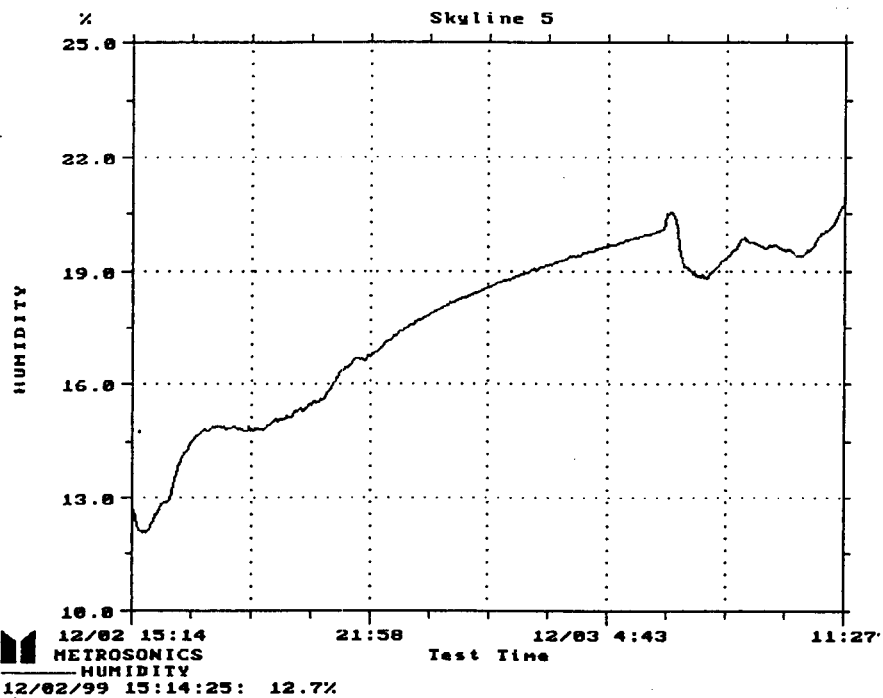
RELATIVE HUMIDITY:

ALARMS: LOWER: 0.0 % UPPER: 100.0 %
MINIMUM: 12.1 % OCCURRED 12/02/99 AT 15:32:25
AVERAGE: 17.6 %
MAXIMUM: 20.7 % OCCURRED 12/03/99 AT 11:21:25

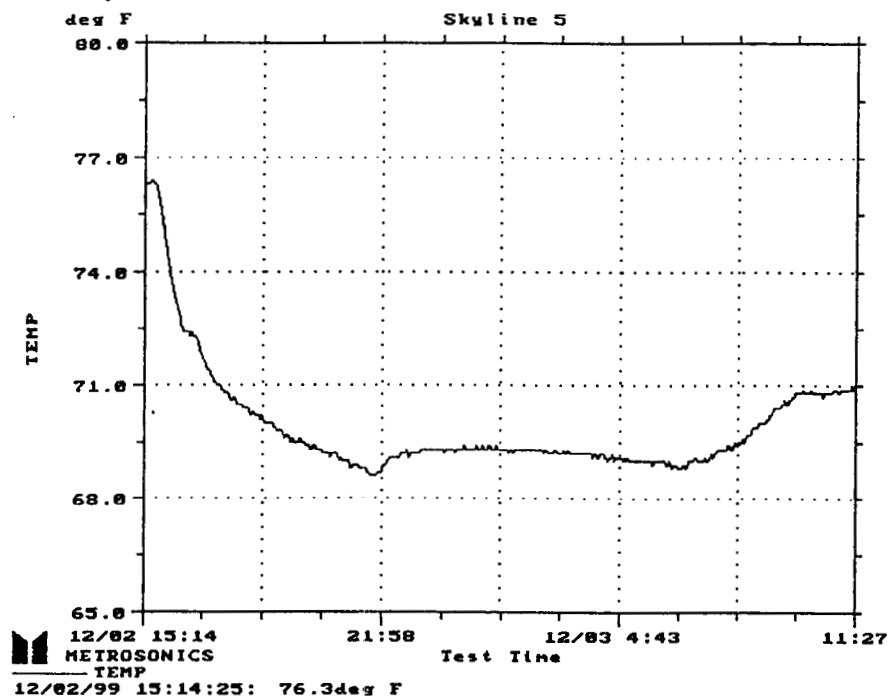
CARBON MONOXIDE:

ALARMS: LOWER: 0 ppm UPPER: 0 ppm
MINIMUM: 0 ppm OCCURRED 12/02/99 AT 18:27:25
AVERAGE: 0 ppm
MAXIMUM: 1 ppm OCCURRED 12/02/99 AT 15:43:25

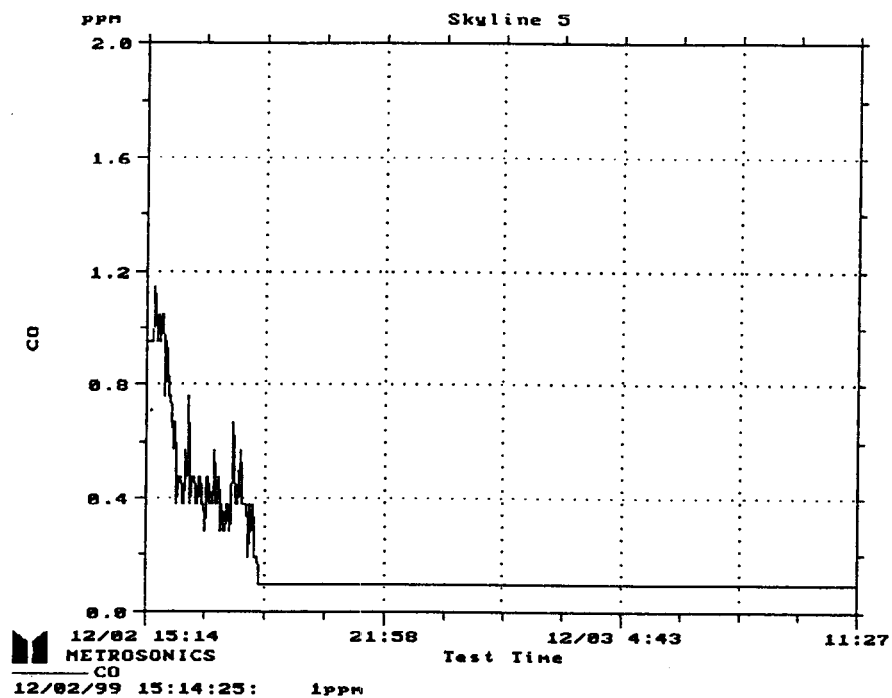
Filename.....5011 Logger...aq-501 SN 1414
Test Location.....Skyline 5
Employee Name.....9th Floor Conference Room
Employee Number...910-99-0633-0028
Department.....~~November~~ 2 and 3, 1999
Comment Field 1...~~DECEMBER~~
Comment Field 2... *1 unit*
Numeric Code #1... #2... #3... #4... #5...



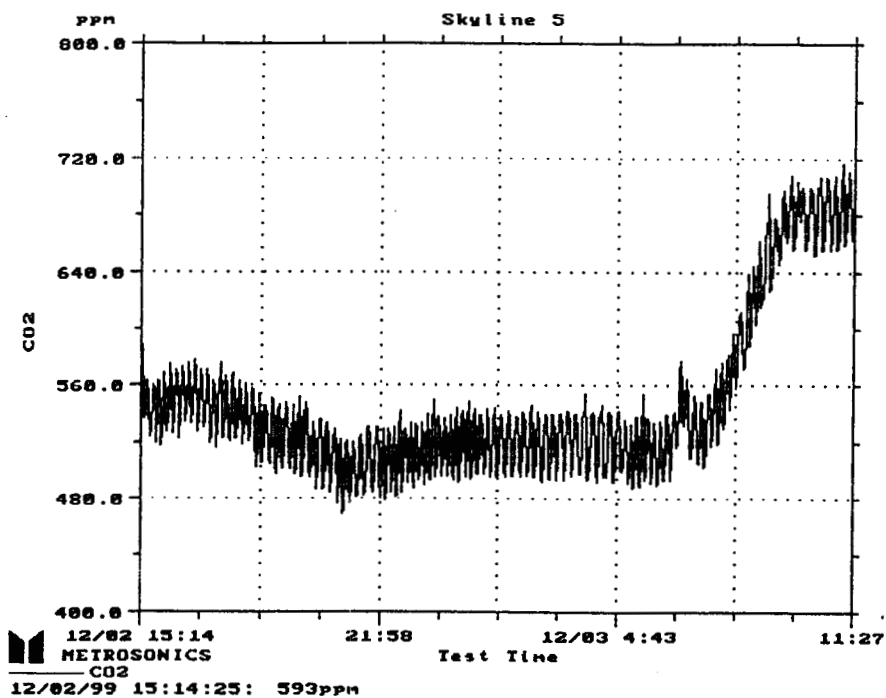
Filename.....5011 Logger...aq-501 SN 1414
Test Location.....Skyline 5
Employee Name.....9th Floor Conference Room
Employee Number...910-99-0633-0028
Department.....~~November~~ 2 and 3, 1999
Comment Field 1...~~DECEMBER~~
Comment Field 2... *2mg*
Numeric Code #1... #2... #3... #4... #5...



Filename.....5011 Logger...aq-501 SN 1414
Test Location.....Skyline 5
Employee Name.....9th Floor Conference Room
Employee Number...910-99-0633-0028
Department.....~~November~~ December 2 and 3, 1999
Comment Field 1...~~DECEMBER~~ *turning*
Comment Field 2...
Numeric Code #1... #2... #3... #4... #5...



Filename.....5011 Logger...aq-501 SN 1414
Test Location.....Skyline 5
Employee Name.....9th Floor Conference Room
Employee Number...910-99-0633-0028
Department.....~~November~~ 2 and 3, 1999
Comment Field 1...~~DECEMBER~~
Comment Field 2... *turns*
Numeric Code #1... #2... #3... #4... #5...



Certificate of Laboratory Analysis

DOD, WHS, RE & F/SEMD/SOHB

Pentagon Rm 2D533

Arlington, VA 20301-1155

Attn: Michael Langone

Project: Skyline 5

910-99-0633/0028

Date Received: 12/2/99

Date Reported: 12/10/99

Page 1 of 9

Job ID: 99 936

Client Sample Number: JADD991202-1

Lab Sample Number: 99 936-01

Sampling Location: 9th Floor Conference Room, on Table

Date Collected: 12/2/99

Volume/Area: 141.5 L

TEST REQUESTED: 1005 AIR, Total BACTERIAL Count w/identifications
1030 AIR, Total FUNGAL Count w/identifications

Total BACTERIAL Count: 7 cfu/m³

BACTERIA Isolated: Bacillus species

100%

Date Analyzed: 10/6/90

Analyst: Michael D. Merritt, B.S., B.A.

Total FUNGAL Count: 63 cfu/m³

FUNGUS Isolated: Stachybotrys chartarum (atra)

44%

Detection Limits: 7 cfu/m³

Date Analyzed: 12/7/99

Analyst: Ann Atkinson, B.S., MT (ASCP)

Certificate of Laboratory Analysis

DOD, WHS, RE & F/SEMD/SOHB

Pentagon Rm 2D533

Arlington, VA 20301-1155

Attn: Michael Langone

Project: Skyline 5

910-99-0633/0028

Date Received: 12/2/99

Date Reported: 12/10/99

Page 2 of 9

Job ID: 99 936

Client Sample Number: JADD991202-2

Lab Sample Number: 99 936-02

Sampling Location: 9th Floor Conf. Room, in Return Air Plenum

Date Collected: 12/2/99

Volume/Area: 141.5 L

TEST REQUESTED: 1005 AIR, Total BACTERIAL Count w/Identifications
1030 AIR, Total FUNGAL Count w/Identifications

Total BACTERIAL Count: 21 cfu/m³

BACTERIA Isolated: Coag-negative Staphylococcus species

67%

Date Analyzed: 12/6/99

Analyst: Michael D. Merritt, B.S., B.A.

Total FUNGAL Count: 150 cfu/m³

FUNGUS Isolated: Stachybotrys chartarum (atra)

71%

Detection Limits: 7 cfu/m³

Date Analyzed: 12/7/99

Analyst: Ann Atkinson, B.S., MT (ASCP)

Certificate of Laboratory Analysis

DOD, WHS, RE & F/SEMD/SOHB

Pentagon Rm 2D533

Arlington, VA 20301-1155

Attn: Michael Langone

Project: Skyline 5

910-99-0633/0028

Date Received: 12/2/99

Date Reported: 12/10/99

Page 3 of 9

Job ID: 99 936

Client Sample Number: JADD991202-3

Lab Sample Number: 99 936-03

Sampling Location: 9th Floor, Room 9182

Date Collected: 12/2/99

Volume/Area: 141.5 L

TEST REQUESTED:

1005 AIR, Total BACTERIAL Count w/Identifications

1030 AIR, Total FUNGAL Count w/Identifications

Total BACTERIAL Count: 14 cfu/m³

BACTERIA Isolated: Coag-negative Staphylococcus species

50%

Date Analyzed: 12/6/99

Analyst: Michael D. Merritt, B.S., B.A.

Total FUNGAL Count: 56 cfu/m³

FUNGUS Isolated: Stachybotrys chartarum (atra)

13%

Detection Limits: 7 cfu/m³

Date Analyzed: 12/7/99

Analyst: Ann Atkinson, B.S., MT (ASCP)

Certificate of Laboratory Analysis

DOD, WHS, RE & F/SEMD/SOHB

Pentagon Rm 2D533

Arlington, VA 20301-1155

Attn: Michael Langone

Project: Skyline 5

910-99-0633/0028

Date Received: 12/2/99

Date Reported: 12/10/99

Page 4 of 9

Job ID: 99 936

Client Sample Number: JADD991202-4

Lab Sample Number: 99 936-04

Sampling Location: 9th floor, Room 9112

Date Collected: 12/2/99

Volume/Area: 141.5 L

TEST REQUESTED: 1005 AIR, Total BACTERIAL Count w/Identifications
1030 AIR, Total FUNGAL Count w/Identifications

Total BACTERIAL Count: 77 cfu/m³

BACTERIA Isolated: Micrococcus species

45%

Date Analyzed: 12/6/99

Analyst: Michael D. Merritt, B.S., B.A.

Total FUNGAL Count: 56 cfu/m³

FUNGUS Isolated: Penicillium species

38%

Detection Limits: 7 cfu/m³

Date Analyzed: 12/7/99

Analyst: Ann Atkinson, B.S., MT (ASCP)

Certificate of Laboratory Analysis

DOD, WHS, RE & F/SEMD/SOHB

Pentagon Rm 2D533

Arlington, VA 20301-1155

Attn: Michael Langone

Project: Skyline 5

910-99-0633/0028

Date Received: 12/2/99

Date Reported: 12/10/99

Page 5 of 9

Job ID: 99 936

Client Sample Number: JADD991202-5

Lab Sample Number: 99 936-05

Sampling Location: Outside

Date Collected: 12/2/99

Volume/Area: 141.5 L

TEST REQUESTED: 1005 AIR, Total BACTERIAL Count w/Identifications
1030 AIR, Total FUNGAL Count w/Identifications

Total BACTERIAL Count: 35 cfu/m³

BACTERIA Isolated: Coag-negative Staphylococcus species 60%

Date Analyzed: 12/6/99

Analyst: Michael D. Merritt, B.S., B.A.

Total FUNGAL Count: 290 cfu/m³

FUNGUS Isolated: Cladosporium species 64%

Detection Limits: 7 cfu/m³

Date Analyzed: 12/7/99

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JADD991202-6

Lab Sample Number: 99 936-06

Sampling Location: Blank

Date Collected: 12/2/99

Volume/Area: 0 L

TEST REQUESTED: 1005 AIR, Total BACTERIAL Count w/Identifications
1030 AIR, Total FUNGAL Count w/Identifications

Total BACTERIAL Count: No growth.

Date Analyzed: 12/6/99

Analyst: Michael D. Merritt, B.S., B.A.

Total FUNGAL Count: No growth.

Detection Limits: N/A

Date Analyzed: 12/7/99

Analyst: Ann Atkinson, B.S., MT (ASCP)

Certificate of Laboratory Analysis

DOD, WHS, RE & F/SEMD/SOHB

Pentagon Rm 2D533

Arlington, VA 20301-1155

Attn: Michael Langone

Project: Skyline 5

910-99-0633/0028

Date Received: 12/2/99

Date Reported: 12/10/99

Page 6 of 9

Job ID: 99 936

Client Sample Number: JADD991202-7

Lab Sample Number: 99 936-07

Sampling Location: 9th Floor Conf. Rm., on Window Ledge

Date Collected: 12/2/99

Volume/Area: 1" x 1"

TEST REQUESTED: 1006 WIPE, Total BACTERIAL Count w/Identifications
1031 WIPE, Total FUNGAL Count w/Identifications

Total BACTERIAL Count: 20 cfu/in²

BACTERIA Isolated: Bacillus species

100%

Date Analyzed: 12/6/99

Analyst: Michael D. Merritt, B.S., B.A.

Total FUNGAL Count: No growth.

Detection Limits: 1 cfu/in²

Date Analyzed: 12/7/99

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JADD991202-8

Lab Sample Number: 99 936-08

Sampling Location: 9th Floor Conf. Rm., Top of Light Fixture

Date Collected: 12/2/99

Volume/Area: 1" x 1"

TEST REQUESTED: 1006 WIPE, Total BACTERIAL Count w/Identifications
1031 WIPE, Total FUNGAL Count w/Identifications

Results: Unable to quantitate bacteria due to heavy fungal growth.

BACTERIA Isolated: Bacillus species

85%

Date Analyzed: 12/6/99

Analyst: Michael D. Merritt, B.S., B.A.

Total FUNGAL Count: 420 cfu/in²

FUNGUS Isolated: Penicillium species

51%

Detection Limits: 1 cfu/in²

Date Analyzed: 12/7/99

Analyst: Ann Atkinson, B.S., MT (ASCP)

Certificate of Laboratory Analysis

DOD, WHS, RE & F/SEMD/SOHB
Pentagon Rm 2D533
Arlington, VA 20301-1155
Attn: Michael Langone
Project: Skyline 5

Date Received: 12/2/99
Date Reported: 12/10/99
Page 7 of 9
Job ID: 99 936

910-99-0633/0028

Client Sample Number: JADD991202-9 Lab Sample Number: 99 936-09
Sampling Location: 9th Fl., Conf. Rm., on Top of Gypsum Ceiling Tile
Date Collected: 12/2/99 Volume/Area: 1" x 1"

TEST REQUESTED: 1006 WIPE, Total BACTERIAL Count w/Identifications
1031 WIPE, Total FUNGAL Count w/Identifications

Results: Quantitation not possible due to confluent growth of organism(s).

BACTERIA Isolated: Bacillus species 98%

Date Analyzed: 12/6/99

Analyst: Michael D. Merritt, B.S., B.A.

Total FUNGAL Count: 140 cfu/in²

FUNGUS Isolated: Stachybotrys chartarum (atra) 35%

Detection Limits: 1 cfu/in²

Date Analyzed: 12/7/99

Analyst: Ann Atkinson, B.S., MT (ASCP)

Certificate of Laboratory Analysis

DOD, WHS, RE & F/SEMD/SOHB

Pentagon Rm 2D533

Arlington, VA 20301-1155

Attn: Michael Langone

Project: Skyline 5

910-99-0633/0028

Date Received: 12/2/99

Date Reported: 12/10/99

Page 8 of 9

Job ID: 99 936

Client Sample Number: JADD991202-10 Lab Sample Number: 99 936-10

Sampling Location: 9th Fl., Rm 9182 Window Ledge, Center

Date Collected: 12/2/99 Volume/Area: 1" x 1"

TEST REQUESTED: 1006 WIPE, Total BACTERIAL Count w/Identifications
1031 WIPE, Total FUNGAL Count w/Identifications

Total BACTERIAL Count: 5 cfu/in²

BACTERIA Isolated: Bacillus species 100%

Date Analyzed: 12/6/99

Analyst: Michael D. Merritt, B.S., B.A.

Total FUNGAL Count: 15 cfu/in²

FUNGUS Isolated: Stachybotrys chartarum (atra) 93%

Detection Limits: 1 cfu/in²

Date Analyzed: 12/7/99

Analyst: Ann Atkinson, B.S., MT (ASCP)

Client Sample Number: JADD991202-11 Lab Sample Number: 99 936-11

Sampling Location: 9th Fl., Rm 9112, Window Ledge, Mud Spot

Date Collected: 12/2/99 Volume/Area: 1" x 1"

TEST REQUESTED: 1006 WIPE, Total BACTERIAL Count w/Identifications
1031 WIPE, Total FUNGAL Count w/Identifications

Total BACTERIAL Count: No growth.

Date Analyzed: 12/6/99

Analyst: Michael D. Merritt, B.S., B.A.

Total FUNGAL Count: No growth.

Detection Limits: 1 cfu/in²

Date Analyzed: 12/7/99

Analyst: Ann Atkinson, B.S., MT (ASCP)

Certificate of Laboratory Analysis

DOD, WHS, RE & F/SEMD/SOHB

Pentagon Rm 2D533

Arlington, VA 20301-1155

Attn: Michael Langone

Project: Skyline 5

910-99-0633/0028

Date Received: 12/2/99

Date Reported: 12/10/99

Page 9 of 9

Job ID: 99 936

Client Sample Number: JADD991202-12

Lab Sample Number: 99 936-12

Sampling Location: Blank

Date Collected: 12/2/99

Volume/Area:

TEST REQUESTED: 1006 WIPE, Total BACTERIAL Count w/Identifications
1031 WIPE, Total FUNGAL Count w/Identifications

Total BACTERIAL Count: No growth.

Date Analyzed: 12/6/99

Analyst: Michael D. Merritt, B.S., B.A.

Total FUNGAL Count: No growth.

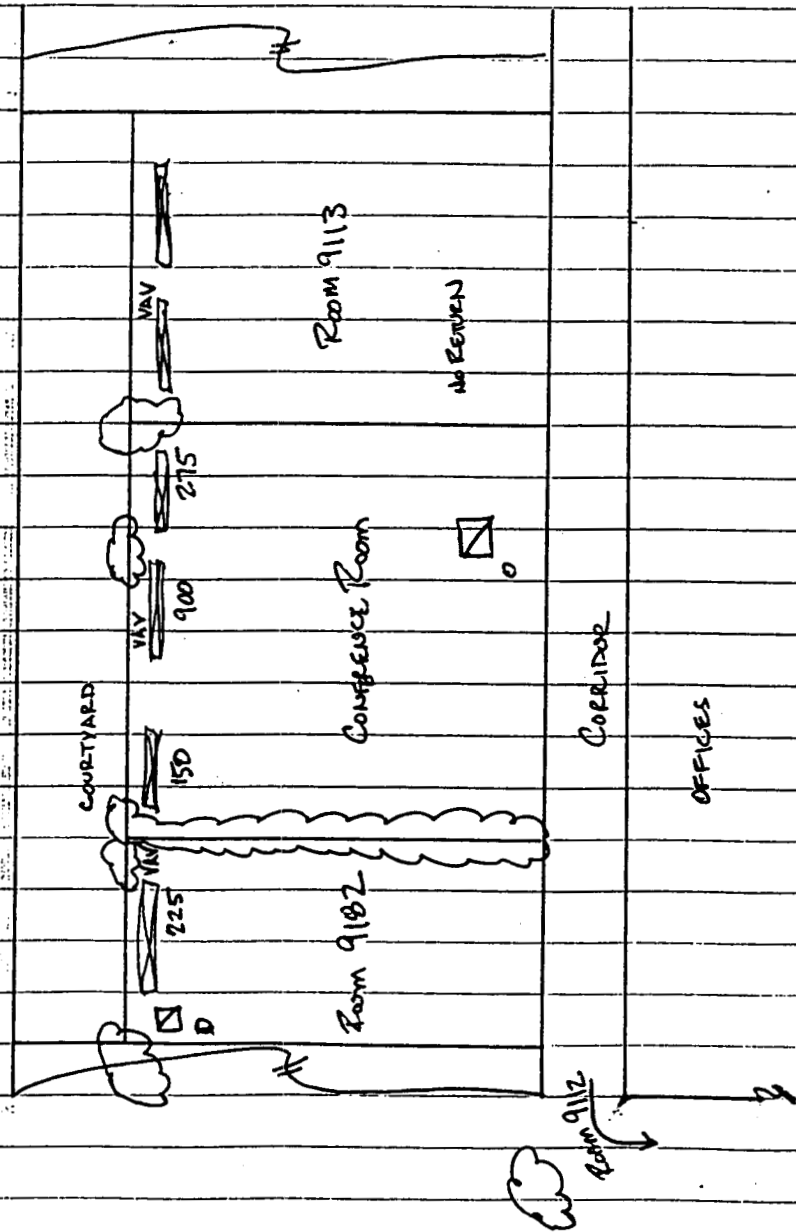
Detection Limits: N/A

Date Analyzed: 12/7/99

Analyst: Ann Atkinson, B.S., MT (ASCP)

MDA 946-00-D-000
#0028 910-99-0633

SKYLINE 5 9th F. CONFERENCE ROOM



- ☐ ~ SUPPLY DIFFUSER
- ☐ = RETURN AIR DIFFUSER / GRAVE
- 225 = AIRFLOW VELOCITY MEASUREMENTS IN FPM
- NA = AREAS OF WATER DAMAGE DESCRIBED

12/2/99
J. M. S.
NOT TO SCALE

**Detection and Decontamination of a Facility
Contaminated with Fungi Including *Stachybotrys chartarum***

Ling-Ling Hung, Ph.D.

US Public Health Service, Division of Federal Occupational Health
150 S. Independence Mall West, Suite 368, Philadelphia, PA 19106
Phone: 215-861-4113 Fax: 215-861-4123
Email: LHUNG@FOH.DHHS.GOV

ABSTRACT

A facility indoor environmental quality investigation was initiated due to onset of employees' health symptoms after fifteen minutes exposure in the facility. The investigation was to determine the extent of contamination, identify the causative agents, design decontamination specifications, and develop and implement a monitoring strategy for clearance sampling.

Massive fungal growth was observed on various surfaces. Air, wipe, contact plate, and bulk samples were collected throughout this facility. Very high fungal levels were detected on wipe and bulk samples (10^6 CFU/in² and 10^7 CFU/g). Outdoor fungal levels were 10^2 CFU/m³ with *Cladosporium* as the predominant fungi. However, indoor fungal burden was at least 100 times greater than that of outdoors. The predominant fungal species recovered from indoors were *Aspergillus* (*A. versicolor* included), *Penicillium*, and *Stachybotrys chartarum*. Results indicated that both basement and ground floor were fungal-contaminated. Moreover, *Stachybotrys chartarum* was detected on the ductwork of the HVAC system.

Specifications were developed to decontaminate the facility, both basement and ground floor, and the ductwork. The facility was under containment with negative air pressure inside the containment. Contaminated bulk materials were removed and disposed of. A ten percent bleach solution and Oxine was used as the disinfectant for surfaces and ductwork, respectively. Sampling was conducted during decontamination process to monitor cleaning. Final clearance samples were taken to evaluate the effectiveness of the cleaning. Air sampling results showed that airborne fungal levels in the facility were compatible to those of outdoors (224 and 230 CFU/m³, respectively). Results from final clearance surface samples, taken after completion of second ductwork cleaning, showed that surface fungal burden of this facility was not different from that of a reference building.



Fax

To: <i>Trish Gotsky</i>	
Of: <i>Safety Environmental GSA NCR</i>	
Fax: <i>202 708 6618</i>	Pages: <i>4</i>
Phone: <i>202-7085236</i>	Date: <i>12-21-99</i>
Re: <i>SKY V</i>	CC: <i>DAVE POIK</i>

☒ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Comments:

901 N. Stuart Street, Suite 1202, Arlington, VA 22203
OFFICE: (703)235-2168, Ext. 30 FAX: (703) 235-2357 or (703) 235-1139



DOD/LEASED FACILITIES DIVISION
FALLS CHURCH AREA
5113 LEESBURG PIKE
SUITE 100, SKYLINE IV
FALLS CHURCH, VA 22041

OFFICE: (703) 681-7711
FAX: (703) 681-7780

DATE: 12-21-99 TO: GSA attn Mr. Carthe

MESSAGE: Mike

I should have a fax of the follow up
report at Skyline 5. Suite 900 in
a very few minutes which I'll pass on to you

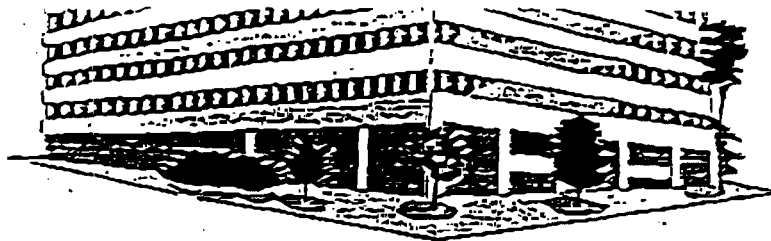
I've call the DISA People & they can meet today
but we will have to upgrade it 1:30 pm.
Our conference room here at Skyline 4
suite 100 is a good place.

Pete from SOA will be here also.

have

FROM:

This transmission has a total of 1 pages (including the coversheet). If you do not receive the specified number of pages, please contact this office. Thank you!



DOD/LEASED FACILITIES DIVISION
FALLS CHURCH AREA
5113 LEESBURG PIKE
SUITE 100, SKYLINE IV
FALLS CHURCH, VA 22041

OFFICE: (703) 681-7711
FAX: (703) 681-7780

DATE: 12.21.99 TO: CSM NOWH attn Mr Carls

MESSAGE: Mike

This is the report we received from
DOD/REF SEWD office. Hope
you can read it.

Pete Gibson of SOWB recommends
removal of the people in a reasonably
short time. I'll want to hear from you
Thomson

Sam Ryan

P.S. I don't yet have
the follow up report.

FROM:

This transmission has a total of 3 pages (including the
coversheet). If you do not receive the specified number of
pages, please contact this office. Thank you!

FAX COVER SHEET

SAFETY AND ENVIRONMENTAL MANAGEMENT DIVISION

TO: Tina America on Contractor
FAX NUMBER: 703 681-7780
OFFICE NUMBER: _____

FROM: Set. G. G. G.
SAFETY & ENVIRONMENTAL MANAGEMENT DIVISION
FAX NUMBER: (703) 693-7810
OFFICE NUMBER: (703) 693-3683

COMMENTS:

Max on Steadybry's Charterum to
follow

NUMBER OF SHEETS (INCLUDING COVER SHEET)

2

20' d 74.01

P & K Microbiology Services, Inc. Tel: 856-437-4044
 Fax: 856-427-3232

The Environmental Microbiology Specialists

1950 Old Cuthbert Road Unit 1, Cherry Hill, New Jersey 08034

Client: M.A. Cesi & Associates, Port Republic, MD

Project ID: NA

Date sampled: October 20, 1999

Date of inoculation: October 20 (air) & 22 (bulk), 1999

Samples submitted By: Matthew Stein

Date characterization completed: October 29, 1999

P&K Report No.: 102199-13

Air (Anderson) Samples

Sample ID	Air vol (L)	Medium used	Dilution factor	Fungal / Bacterial ID	Colony counts	Conc. ^{no} (CFU / mJ)	Percentage* (%)
Conf. RM-M	24.9	MEA	NA	Fungi			
				Basidiomycetes	1	12	11
				Cladosporium	4	47	44
				Penicillium	2	24	22
				Rhodotorula	1	12	11
				sterile fungi	1	12	11
					Total: 106		
Conf. RM-T	24.9	TSA	NA	Bacteria			
				Acidimycetes	2	24	13
				gram negative bacteria and others	(16)	115	67
				Micrococcus	1	12	7
				Micrococcus luteus	1	12	7
				Staphylococcus	1	12	7
					Total: 177		
Outside CR-M	24.9	MEA	NA	Fungi			
				Aspergillus fumigatus	1	12	11
				Cladosporium	4	47	44
				Epidermophyton nigrum	1	12	11
				sterile fungi	2	24	22
				yeast	1	12	11
					Total: 106		
Outside CR-T	24.9	TSA	NA	Bacteria			
				Bacillus	6	71	20
				gram negative bacteria and others	(21)	247	70
				Staphylococcus	3	35	10
					Total: 353		

Bulk Samples

Sample ID	Weight used (g)	Medium used	Dilution factor	Fungal / Bacterial ID	Colony counts	Conc. ^{no} (CFU / g)	Percentage* (%)	
Conf. RM S	0.13	MEA	4160X	Fungi				
				Penicillium	4	109,333	1	
				Stachybotrys chartarum	276	7,544,000	99	
					Total: 7,553,333			
		TSA		16700X	OVERLOADED	> 500	> 54,666,660	NA
					NA		NA	

Sheetrock wall
 - visible growth



Sign IN

Name	Agency/Company	phone number.
Michael CABLE	GSA	703-235-2168
1. J. J. J. J.	GSA	202-708-7621
TRACY Terwilliger	DISA/DZ	703-681-0286
HELEN CREEK	DISA/DZ	703-681-0344
RONALD DORMAW (SES)	DISA/DZ	703-681-0316
JEFF Amy	Applied Environmental	703 648-0822
SAM RYAN	WHS/LFO	703 686-7711
BRENT BITZ	SMITH	703-764-1101
Brian Higgins	WHS-REF/SEMD	703-588-7151
JONATHAN SCHATZ	AAS Env.	703-763-1045
ED FROIT	DOD/WHS/REF/LFD	703-604-5730
KENT WOMACK	" "	" " "
Jim Foster	AAS Environmental	703 767-1151
Dennis Whitworth	C.E.S.	703-769-1109
Scott Stern	DISA/D43	703-607-4469
Craig Gerardo	CES	703/284-7661/703 920
Bonnie Muth	CES	703/284-7664 3978 FX
MARYANN Ramos	CIV. EMPLOYEE HEALTH SUE (CEHS) Pentagon	703/ 697-0850
Michael N. Leaban	CEHS Mutual Direct	703 695-7757
Vera America	WHS	703-681-7711
Jim Greeshy	GSA - WPU (Safety)	202 708 5254
James Hodges	GSA Rep. (Applied) (202)	708-5253
Bob Loh	Safety	693-3682

COPY

DECEMBER 21, 1999
MINUTES FROM MEETING:
ATTENDANCE LIST ATTACHED

SUBJECT: SURFACE CONTAMINANTS

MICHAEL CASTLE, GSA, NOVA PROGRAM DIRECTOR CHAIRED THE MEETING AND MADE OPENING REMARKS LEADING INTO AN OPEN FORUM ON THE ABATEMENT OF SURFACE CONTAMINANTS LOCATED IN SPACE LEASED TO THE DEPARTMENT OF DEFENSE ON THE NINTH FLOOR IN THE SKYLINE FIVE BUILDING.

PETE GILLSON, OSD/SAFETY INSPECTOR MADE COMMENTS PERTAINING TO THE RESULTS OF THE MICROBIOLOGY TEST PERFORMED IN THE SPACE.

TRISH GRETSKY, GSA S&M SPECIALIST MADE RECOMMENDATIONS ON FOLLOWUP INSPECTIONS RELATED TO CONTAMINANT REMOVAL AND THE OVERALL CONSTRUCTION ABATEMENT PROCESS.

SAM RYAN, DEPARTMENT OF DEFENSE FACILITY MANAGER GAVE AN OVERVIEW OF THE RECURRING WATER PENETRATION PROBLEMS AND THE DIRECT RELATIONSHIP TO THE POLLUTANTS FOUND IN THE SPACE.

JOE BALINAS, CIVILIAN EMPLOYEE HEALTH REPRESENTATIVE SUGGESTED ANY EMPLOYEE ADVERSELY AFFECTED BY THE PRESENT ENVIRONMENTAL PROBLEM CAN AVAIL THEMSELVES OF THE CLINIC SERVICES TO INCLUDE PHYSICAL EXAMINATIONS.

CRAIG GERARDO, CHARLES E. SMITH REPRESENTATIVE SPOKE ABOUT THE REMEDIAL MEASURES HE HAS IMPLEMENTED IN CLEANING UP THE CONTAMINATED SURFACES AND WILL GIVE MR. RYAN AND MR. POLK A SCHEDULE OF FUTURE CLEANUP AND MAINTINANCE OF THE ROOF AREA. (THIS WILL INCLUDE SOME ROOF REPLACEMENT)

TRACY TERWILLIGER, DISA SKYLINE 5, 9TH FLOOR GAVE PERSONAL EXPERIENCE OF HOW HER HEALTH HAS BEEN AFFECTED BY THE CONTAMINANTS.

HELEN CREER, DISA SKYLINE 5, 9TH FLOOR REQUESTED A DETAILED EXPLANATION AND SCHEDULE OF THE ABATEMENT PROCESS OF THE CONTAMINATED AREAS. MR. RYAN SAID HE WOULD FORWARD THE INFORMATION TO ALL ATTENDEES FROM DISA.

DAVID POLK, GSA PROPERTY MANAGER REQUESTD FROM MR. GERARDO AN ABATEMENT PLAN AND SCHEDULE FOR CONTAMINANT REMOVAL AND SUBSEQUENT ROOF REPAIRS.

CURTIS THOMAS, GSA CUSTOMER SERVICE REPRESENTATIVE PRESENTED REPORT AND PHOTOS OF THE DAMAGED AREAS.

SAM RYAN, DOD INFORMED DISA ATTENDEES THAT HE WOULD BE THE POINT OF CONTACT FOR ALL INQUIRIES RELATED TO THIS PROJECT.

MICHAEL CASTLE, GSA MADE CLOSING REMARKS EXPRESSING THE FULL COOPERATION OF GSA IN RESOLVING THIS ISSUE.

THE MEETING WAS ADJOURNED.

Date: December 21, 1999

Meeting: Reference Skyline 5, Ninth Floor

Name	Office	Telephone	Fax
DAVID C POLK	GSA/SKYLINE CSC	703-756-6270	756-6289
BRIAN S. JONES	DISA SAFETY MGR	703-607-6460	607-4547
BOB CLAPP	DISA BLDG. MGR.	703-681-2570	607-4547
TRACY TERWILLIGER	DISA D20 ^{SKY5} 9th Floor	681-0286	681-0341
Jeanette Boyd	DISA D43 (Hqs)	607-4419	607-4547
MARWAN Ramos PAC MP	Civilian Employee Health Sec - Pentagon	703 697-0850	697-8652
JOE BALINAS	CIV. EMP. HSA DISA PENTAGON	(703) 697-0850	697-8652
TRISH GRETSKY	GSA - SEEM	(703) 708-5254	708-66146
MICHAEL J. CASHE	GSA Program Director NOVA SDT	(703) 235-2168	(703) 235-3723
JOHN BRADY	OSD/WHs. Safety	703-693-3604	
PETER GILLSON	" " "	" " "	
Linda PROCTOR	DOD/WHs/FCA	703-681-7711	703-681-7711
Curtis THOMAS	GSA/SKYLine	703-756-6270	703-756-6289
HELEN CREEK	DISA(D2) SKYLINE	703-681-0244	703-681-0341
RUSS CHESTER	DISA(D2) SKY5, 9th Fl	703-681-0244	703-681-0341
Craig Gerardo	CES	703/284-7661	703/284-3978
Sam RYAN	DOD Grand Facilitator	703 681-7711	681-7780



**General Services Administration
National Capital Region
Washington, DC 20407**

SKY 5, 9TH FLOOR

- 02/15/00.....DISA/DOD approved replacing the cabinet in room 9173
- 02/17/00.....Refinish mullions (window frames), sand & prime repaired areas and strip wallpaper backing in room 9119 (this will be completed after hours).
- 02/18/00.....Painting in repaired areas (after hours). CES has asked for an extension on the Cure letter for roof leak repair at Sky 5. Their request was reviewed and granted through Friday, March 10, 2000. The date provides for several additional days in case of delays due to inclement weather. On site inspection by all parties involved to survey progress of construction work.
- 02/22/00.....Walk through with CES, DOD and GSA Sky 5, 9th floor. Room 9167 walls were not skimmed/prepared before painting, cove base and carpets need cleaning. Room 9191 new paint peeling off the window frame. Room 9198 ceiling tile needs replacing and corner moulding put back. Room 9188 wall needs paint touch-up, looks like they did a rush job. Room 9187A painting is good but the furniture was banged up against the wall when put back in place leaving one small hole and a black mark on the newly painted wall. Room 9182 the side wall does not look like it was painted/or marks on the wall faded through new paint and new paint coming up from the window frame. Room 9181 new paint peeling from window frame. Room 9114 room all painted, looks good. Room 9119 both side walls need touch-up painting and ceiling tile needs to be replaced. CES is addressing the painting and the peeling of the new finish on the window frames.

Charles E. Smith Commercial Realty

**Skyline Management Office
5201 Leesburg Pike, Suite 101
Falls Church, VA, 22041
(703) 284-7660 * FAX (703) 820-3978**

February 15, 2000

Mr. Carl W. Battenfeld
Building Manager
General Services Administration
5203 Leesburg Pike, Ste. 1407
Falls Church, VA 22041

Re: Request for Extension for Cure, Sky 5, 9th Floor, Leak Repairs

Dear Carl:

This letter serves as a request for extension of cure for roof leak repairs at the above-referenced location.


Due to the extreme weather conditions experienced in January, the roof replacement work has been delayed. The roof is now water tight, and no further leaks reported. The rubber 2-ply membrane has been applied and the new flashing has been started. The work remaining is the expansion joint covers, insulation, filter fabric, rock ballast, and concrete paver walkway.

Again, weather conditions will continue to dictate the actual completion date. Therefore, we are requesting an extension through Friday, March 10, 2000. This date provides for several additional days in case of delays due to inclement weather.

I am hopeful this extension meets with your approval. If there are any delays beyond this date, I will let you know immediately.

Thank you for your consideration in this matter.

Sincerely,
CHARLES E. SMITH COMMERCIAL REALTY



Bonnie J. Muth
Building Director



**General Services Administration
National Capital Region
Washington, DC 20407**

January 17, 2000

Ms. Bonnie J. Muth
Building Director
Charles E. Smith Commercial Realty
5201 Leesburg Pike, Ste. 101
Falls Church, Va. 22041

Re.: Reply for Extension of Cure, Sky 5, 9th Floor, Leak Repairs

Dear Ms. Muth:

The letter dated February 15, 2000 requesting an extension for Cure, Sky 5, 9th Floor, Leak Repairs has been reviewed and accepted by the General Services Administration, NOVA/SKYLINE office. GSA expects a 3-hour response time if any leaks are detected on the 9th floor of Skyline #5. This letter stands firm until all roof work is complete.

If the Friday, March 10, 2000 is not sufficient time to complete the project, please contact my office without delay.

Sincerely,

Carl W. Battenfeld
Buildings Manager

cc: Enforcement File

FAXGSA
SKYLINE CUSTOMER SERVICE CENTERDate 2-18-00
Number of pages including cover sheet 3

To:

Trish Gutschy

From:

CARL W. BATTENFELDBUILDINGS MANAGER

Phone

Fax Phone

CC:

Phone

Fax Phone

703 756-6270703 756-6289

REMARKS.

☐ Urgent☐ For your review☐ Reply ASAP☐ Please commentSky 5, 9th floor

Skyline Five- 9th Floor – CES Remediation Summary

For week ending 2/19/00

Note – All new entries will be listed in "bold"

- 11/6/99 -Weekend remediation work -performed by Environmental Group, in conference room 9182, offices 9113, 9182, 9189. Removal of drywall and wipe-down of surfaces. In office 9191 exploratory work performed.
- 11/8/99 -Week of -Roofing consultant engaged to discuss course of action for roof repairs. Roofing contractor engaged to repair leaks above conference room, adjacent offices, and office 9112. Caulking contractor engaged to review exterior wall and window joints for possible water penetration. Contractor engaged to provide infrared survey of suspect roof areas to help determine areas for repairs.
- 11/15/99 -Week of – Continue roofing and caulking repairs. Received report from infrared roof survey.
- 11/22/99 -Week of – Performed additional roofing repairs
- 12/6/99 -Week of- Start of Cooling tower roof replacement
- 12/20/99 -Week of- Cooling tower roof replacement completed. Corrects leakage into conference room 9182 and at demising wall locations adjacent to offices 9113 and 9182.
- 1/5/00 -Daytime- CES notified by DOD and GSA that additional offices, 9188, 9189, 9187B, and 9182 experienced water leaks during the evening. CES suspects that intense storm during prior evening, which included driving rains contributed to window leaks in those offices. Roofing and caulking contractor engaged to review and repair areas.
- 1/5/00 -CES performs second round of remediation work in conference room and adjacent offices. Included work in return air plenum in these areas and additional exploratory work.
- 1/19/00 - Start of roof replacement for S. George Mason Dr. side of building. Delayed do to weather conditions. Estimated completion, mid February.
- 1/25/00 - CES performs remediation work in office 9112. Removal of water damage materials and cleaning of surfaces including return air plenum. CES performs work under controlled containment even-though IAQ test results were negative from DOD and CES testing.
- 1/29/00 - CES begins reconstruction of conference room, walls, ceiling, etc...
- 1/31/00 - Future planned remediation work to be performed in ceiling plenum, replace carpeting in offices adjacent to conference room, and complete reconstruction of areas involved in remediation work.
- 2/1/00 - Contractor for window blinds inspects conference room 9182 and adjacent office to provide new window blinds. Original blinds removed during remediation work
Expect materials within 2 weeks.
- 2/2/00 - Reviewed remaining reconstruction items with Mgmt Construction. Construction work planned for Sat. 2/5/00
- 2/3/00 - Metal refinishing contractor inspected window frames to remove calcium stains/deposits.
Work pending scheduling.

- 2/4/00 -Week ending- Approximately 20% of the South George Mason Dr. roof section replacement work has been completed.
- 2/4/00 - Friday 2/4 – Structural specialist inspects window framing structure in conference room 9182, report of findings to follow.
- 2/8/00 - Window cleaning contractor visits office space to test procedure for removing interior window stains. Results positive, balance of work planned within one week.
- 2/12/00 - Weekend work consisted of continue construction build back. Specifically, removing and prepping offices with vinyl wall covering (offices 9167 and 9119) and finishing other drywall areas in preparation for final paint coat.
- 2/12/00 - Week ending – Roofing contractor completed waterproofing stage of roof replacement for lower roof area along South George Mason side of building. At this point roof is watertight. Continuation of roofing project includes installing insulation and ballast. Full completion estimated 3/10/00.
- 2/15/00 - Carpet contractor inspects offices to receive new carpeting. Expect installation week of 2/21/00, carpeting on order.
- 2/15/00 - Metal refinishing contractor inspects offices with stained window mullions. Work schedule for the evenings of 2/17 and 2/18. This is second metal contractor, first contractor not performing as needed.
- 2/16/00 - Window cleaning contractor begins cleaning of interior and exterior window surfaces for the entire suite. Includes all stained windows.
- 2/18/00 Weekend of 2/18/00 – Completion of final finish coat for all new wall construction.

FAXGSA
SKYLINE CUSTOMER SERVICE CENTER

Date

2-8-00

Number of pages including cover sheet

2

To:

Tush Gotsky

From:

CARL W. BATTENFELDBUILDINGS MANAGER

Phone

Fax Phone

CC:

703 666 18

Phone

Fax Phone

703 756-6270703 756-6289

REMARKS:

☐ Urgent☐ For your review☐ Reply ASAP☐ Please comment

Update from CEG
Sky 5. 9th FL



**General Services Administration
National Capital Region
Washington, DC 20407**

SKY 5, 9TH FLOOR

02/02/00 DISA called at 2:00pm, water leak in the ceiling in room 9209. Meet with CES & DISA on site. Notified DOD. CES taking care of leak.

02/03/00 Metal refinisher to repair the metal finishes on the damaged window frames. Meet with DOD @ 8:00am on 9th floor.

02/04/00 Structural specialist to inspect window framing structure in conference room 9182, findings to follow. CES, GSA & DOD were on site. GSA DOD checked the progress of the roof replacement, CES states that 20% of the south George Mason Dr. will be complete.
* The structural specialist found the window framing in sound condition. A written report confirming this will follow from CES. CES looked at Room 9209 where the drywall is cracked over the building expansion joint. This is natural movement since the wall didn't have the correct expansion filler joint attached (hard connection instead of flexible). Room 9191 is leaking due to roof work (nothing serious), this may happen in different areas as the roof is being repaired. Checked the roof with CES, work is progressing well considering the weather this week.

02/05/00 CES to repair drywall, paint and replace ceiling tiles.

02/07/00 Metal refinisher has completed rooms 9183-9188. They still have rooms 9167, 91, 89, 93, 81, 13 and 9195 to complete. Helen Creel with DISA is requesting that the wall paper in rooms 9167, 9199 and 9119 be removed and the walls painted. Room 9167 has a small window leak, this is a old leak.

02/08/00 Walked all Sky 5 checking every floor for Gov't. personnel. Applied to start testing through out the building on 02/09/00. E-mailed all findings to Trish Gretskey.

02/09/00 DISA called at 7:30am with another leak in room 9157. GSA responded over to Sky 5 and found water had filled up a light fixture and soaked a ceiling tile. The roofers are working right over this space. CES is taking care of the problem. DoD Bldg. Mgt. was notified and responded. Applied will be doing testing today and Thurs. the 10th. All arraignments have been made for them to access spaces.

Charles E. Smith Commercial Realty

Skyline Management Office
5201 Leesburg Pike, Suite 101
Falls Church, VA 22041
(703) 284-7666 • FAX (703) 820-3978

February 10, 2000

Ms. Helen Creel
Defense Information Systems Agency
5111 Leesburg Pike
Suite 900
Falls Church, VA 22041

Re: Replacement of Wall Covering
Suite 900

Dear Helen:

I understand that you requested Charles E. Smith to remove the vinyl wall covering from several offices on the grounds that the wall covering could represent a health hazard to the people who work in the area. We will have the wall covering removed per your request; however, I want to make clear that there is not the slightest evidence or any grounds for reasonable suspicion that any potential health hazard exists due to the wall covering.

We will remove the wall covering for the sole purpose of easing your concerns and in the interest of supporting your efforts to alleviate the concerns of your employees.

Sincerely,
Charles E. Smith Commercial Real Estate Services

(b) (6)

Denny Whitworth
Vice President

Cc: Mike Kastle
Dave Polk
Tina America

FAXGSA
SKYLINE CUSTOMER SERVICE CENTER

Date

2-14-00

Number of pages including cover sheet

2

To:

Trish Gutsky

From:

CARL W. BATTENFELDBUILDINGS MANAGER

Phone

Fax Phone

CC:

703 6618

Phone

Fax Phone

703 756-6270703 756-6289

REMARKS:

☐ Urgent☐ For your review☐ Reply ASAP☐ Please comment

Letter from CES to DISA/DOD
up-date to follow letter today

Happy Valentine's Day Trish



**General Services Administration
National Capital Region
Washington, DC 20407**

SKY 5, 9TH FLOOR

02/10/00 1:30pm, walk through with CES & window cleaner.
New cleaner worked well on windows. CES will remove all wall
covering on the 9th floor, per Ms. Creel request (see letter). Room
9209 will have a flexible expansion joint added to the drywall.

2/14/00 Called Tracy Terwilliger w/DISA to see if any leaks penetrated
the roof this weekend. None have been reported. Window framers
to work Sat. 19th to refinish windows. Window cleaners to work
during the week (daytime). All wallpaper was removed
except for room 9199 (this will be done later),
sanding and painting will be done the weekend of the 19th.
On the roof, all water proofing is complete (unofficially), flashing and
insulating will be put down this week.

FAXGSA
SKYLINE CUSTOMER SERVICE CENTER

Date

2-18-00

Number of pages including cover sheet

2

To:

Trish Gutky

From:

CARL W. BATTENFELDBUILDINGS MANAGER

Phone

Fax Phone

708 6618

CC:

Phone

703 756-6270

Fax Phone

703 756-6289

REMARKS:

☐ Urgent☒ For your review☐ Reply ASAP☐ Please commentSky 5what else would it be

Charles E. Smith Commercial Realty

5201 Leesburg Pike, Suite 101
Fall Church, VA 22041
Tel (703)284-7660 Fax(703)820-3978

February 17, 2000

Mrs. Helen Creel
Defense Information Systems Agency
Suite 900
5111 Leesburg Pike
Falls Church, VA 22041

Re: Skyline Five-Leak Repairs

Dear Mrs. Creel:

As of Friday, February 11, 2000, we have completed the installation of the water proofing membrane on the roof section adjacent to the South George Mason Drive side of the building. Along with this and the earlier replacement of the cooling tower roof above the large conference room, suite 900 should no longer be experiencing any water infiltration problems.

We have reviewed the documentation forwarded to us by Tracy Terwilliger from your office, which depicted areas your staff identified as having water infiltration problems. Further more, my on-site staff performed several inspections of your office to identify areas with evidence of water infiltration.

At this time, it is our understanding that suite 900 is no longer experiencing any water infiltration problems. Please notify us immediately if you or your staff notice any future water leaks in suite 900. You may contact Craig Gerardi, Property Manager for Skyline, at (703)284-7661 to report any problems of this nature.

Sincerely,
Charles E. Smith Real Estate Services L.P.

(b) (6)

Denny Whitworth
Vice President
Management Services

C: Brent Bitz
Mike Kastle
Dave Polk
Tina America

● Patricia L. Gretskey

02/07/2000 03:58 PM

To: David C. Polk/WPD/RW/GSA/GOV, Carl W. Battenfeld/WPD/RW/GSA/GOV, Curtis Thomas/WPD/RW/GSA/GOV, KWomack@osd.pentagon.mil
cc: Douglas G. Benton/WPD/RW/GSA/GOV, applied@erols.com (Jeff Amy)

Subject: Skyline 5

To provide you with an update and to get some access help, Applied Environmental informed me today that they have completed microbial sampling from the following locations. I am also working off of 2 lists, the first provided by Curtis on Jan 24th, the second is an e-mail from Doug Benton dated 2/2. Some conflicts have come up as far as not being allowed access, Applied can't locate the room, etc.
Curtis's list: 100, 102, 103, 107, 302, 4th floor, 500, 601, 801, 808, 809, 810, 9th floor
Doug's list: 100, 103, 105, 107, 400, 401, 403, 404, 405, 407, 409, 5th floor Army Surgeon General, 6th floor Army surgeon General, 500, 601, 600, 624, 602, 808, 810, 900.

9th floor- every office has been sampled

8th floor- Rooms 808 and 810 have been completed. The list Curtis provided me with indicates DOD also has space in 801 and 809 which were not on Doug's list. Are there DOD occupants in these 2 areas and if so, can we get the sampling done this coming wednesday?

7th floor- There were no gov't offices listed for this floor. If this is incorrect, please let me know.

6th floor- Rooms 601 and 602 have been completed. Rooms 600 and 624 were listed on Doug's list. Applied was denied access into 624. Can someone help them access this area for Wed.? Applied was informed on-site that there is no 6th flr Army Surgeon General space in Skyline V. Is this correct?

5th floor- There has been no sampling to date. Applied was informed there was no 5th floor Army Surgeon General space in Skyline V. Is this correct? They need access to Suite 500 for Wed.

4th floor- They have completed sampling in Rooms 400, 401, 403, & 404. Rooms 405, 407, & 409 were not on the original list. Do they need to be included and if so, can Applied get access to these areas on Wed?

3rd floor- There were no gov't offices listed for this floor. If this is incorrect, please let me know.

2nd floor- Same as the 3rd floor.

1st floor- Applied has completed 100, 103, & 105. Room 102 could not be located in Skyline V. Room 107 was not included on the original list. Does it need to be included and if so, can Applied get access to this area on Wed?

At the most recent meeting I attended, one area was requested to be sampled from Skyline IV. This is apparently a room which backs up to Skyline V's Suite 100. There was a past leak which affected an area with a raised floor. Do we have any specifics as to which room this is so that Applied may include this space on Wed.?

As you can see from above, there is potentially quite a few areas to be included in Wednesday's sampling. Access may need to be for Wed. and Thurs. Any and all help will be greatly appreciated. Apparently Applied had quite a few problems last Friday which cost them a lot of sampling time.

8-5
6-9
5-10
4-5
1-4

FAXGSA
SKYLINE CUSTOMER SERVICE CENTER

Date

2-8-00

Number of pages including cover sheet

1

Urgent

To:

Tish Gantky

From:

CARL W. BATTENFELD

BUILDINGS MANAGER

Phone

Fax Phone

CC:

Phone

Fax Phone

703 756-6270

703 756-6289

REMARKS:

☒ Urgent☐ For your review☐ Reply ASAP☐ Please comment

4
IV

sky 5-681 Aring Surgeon Gen.
Contact Sam Brown - 681-3236
Room 638-640
5th fl 538-542

She is the contact for both floors

message on your phone too



Carl W. Battenfeld

02/08/2000 11:33 AM



To: Patricia L. Gretskey/WPY/RW/GSA/GOV, Douglas G. Benton/WPD/RW/GSA/GOV,
cc: KWomack@osd.pentagon.mil

Subject: Skyline 5

Trish,

I walked all Sky 5 checking every floor for Gov't. personnel. Here's what we have:

8th floor - 809 DoD area, contact is Mary Jones, 801 negative

7th floor - negative

6th floor - 600 & 624 DoD are one in the same, contact is Sgt. Perry @ 624

5th floor - 550-559 DoD, contact Sue Mathews, 517 DoD, contact Sonya, 500 DoD, contact Michelle Graves

4th floor - 405, 407 & 409 are negative

3rd floor - negative

2nd floor - negative

1st floor - 102 does not exist & 107 negative, per T. Terwilliger, DISA/DoD

The past leak affecting the raised floor room 100 was taken care of in Sept. 99'..... DISA conformed.....that was from the outside sprinkler system.

Everything is GO for Wed. 16th and Thurs. 17th if they need that day to finish. Any questions, give me a call. I'll fax this to you also.

Carl/Buildings Manager/NOVA-Skyline 2, 703-756-6270, Cell 703-927-0022

- PAIGE Gierardi (703) 284-7766

GSA/NCR/WPX

(AUTO)

THE FOLLOWING FILE(S) ERASED

FILE	FILE TYPE	OPTION	TEL NO.	PAGE	RESULT
063	MEMORY TX		APPLIED ENVIRO	01/01	OK

ERRORS

1) HANG UP OR LINE FAIL 2) BUSY 3) NO ANSWER 4) NO FACSIMILE CONNECTION

Message on your phone

SH is the contact for both floors

Room 638-640

SH #1 538-542

SH 5-681 Amy Sugawara

Contact Sam Brown - 681-3236

☒ Urgent ☐ For your review ☐ Reply ASAP ☐ Please comment

FAX**GSA
SKYLINE CUSTOMER SERVICE CENTER**

Date

2-8-00

Number of pages including cover sheet

2*hash McHale*

To:

Trish Gentry

From:

CARL W. BATTENFELDBUILDINGS MANAGER

Phone

Fax Phone

708 6618

Phone

Fax Phone

703 756-6270703 756-6289

CC:

REMARKS:☒ Urgent☐ For your review☐ Reply ASAP☐ Please comment*All set for Wed. Testing
Sky 5 - in your E-mail too*

GSA/INCR/WPX

(AUTO)

THE FOLLOWING FILE(S) ERASED

FILE	FILE TYPE	OPTION
059	MEMORY TX	

TEL NO.

PAGE RESULT

APPLIED ENVIRO

02/02 OK

ERRORS

1) HANG UP OR LINE FAIL

2) BUSY

3) NO ANSWER

4) NO FACSIMILE CONNECTION

All set for Wed. Testing
Stigs - in your e-mail

☒ Urgent ☐ For your review ☐ Reply ASAP ☐ Please comment

Mark H. Gail

DOUGLAS G. BENTON

02/02/2000 03:19 PM

Sent by: Douglas G. Benton

To: Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA
cc:

Subject: Skyline V Roof Leaks+ Meeting

Federal occupancy in Skyline V is listed below, we need to test in these areas, thanks

----- Forwarded by Douglas G. Benton/WPE/RW/GSA/GOV on 02/02/2000 03:18 PM -----

From: "Womack Kent WHS/REF" <KWomack@osd.pentagon.mil> AT internet on 02/02/2000 01:51 PM

To: Douglas G. Benton/WPD/RW/GSA/GOV
cc: Michael J. Castle/WPD/RW/GSA/GOV, "Fruit Ed WHS/REF" <EFruit@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01

Subject: Skyline V Roof Leaks+ Meeting

no work 2/7TH FLA
3RD FLA

Doug,

In the 1:00 PM meeting Monday with DISA and Charles E. Smith, you asked for a list of agencies in the building. Since it is not a delegated building, we do not get notifications of who GSA has assigned there but Sam Ryan's office indicates that government agencies are in the following locations:

Suites 100, 103, 107, 105, [400, 401, 403, 404, 405, 407, 409] 5th floor Army Surgeon General Space, 6th floor Army Surgeon General Space, 500, 601, 600, 624, 602, 808, 810, 900.

406 (Tina America)

Skyline 4

(2) (9TH FLA)

↓
behind
recess

100
103(2)
105

403(1)
401
400(2)
404

602(2)
601(2)

600 connects w 624

808
810(2)
9TH FLA()

102 - not able to find

703 108 0341
703 108 0341
703 108 0341

tomorrow

(202) 736 1924 ex

TRISH FAX 202-708-6418

Building Name:	FIVE SKYLINE PLACE		VA0244ZZ
	5111 LEESBURG PIKE		
	FALLS CHURCH	VA	22043
Satellite:	SKYLINE	Rep Assigned:	CURTIS THOMAS, JR.
		Rep Emergency Number:	(703) 927-2798
Hours of Operation:			
Lessor Name:	THIRTEENTH SKYLINE ASSOCIATES C/O CHARLES E SMITH		
	5201 LEESBURG PIKE		
	FALLS CHURCH	VA	22041-
DUNS Number:		Federal Tax ID Number:	
Lessor Contact:	DEAN R. LARIMER	Lessor Phone Number:	(703) 284-7664
		Lessor FAX Number:	(703) 820-3978
On Site Contact:		On Site Phone:	
		FAX Num:	
Building Engineer:	BOB MOATS	Phone Number:	(703) 284-7689
		Pager Number:	
Service Call Contact:	DEAN LARIMER	Service Call Number:	(703) 284-7660
Emergency Contact:	DEAN LARIMER	After Hours Number:	(703) 284-7660
Snow Removal Contact:	DEAN LARIMER	Phone Number:	(703) 284-7660
Government Equipment (Y or N):		Yes	
Guard Service:		No	
Government Paid Utilities:		No	

Lease Information Form:

VA0244ZZ	GS-11B-20790	11/03/2002	34,400	RMS. 102, 302,801,808,809
VA0244ZZ	GS-11B-30064	04/05/2002	32,207	RM. 810
VA0244ZZ	GS-11B-30107	08/14/2002	33,500	RMS. 500(601) - DISA
VA0244ZZ	GS-11B-90206	09/30/1999	28,672	4TH FLOOR
VA0244ZZ	GS-11B-40137	02/13/2000	14,074	100,103,107

DISA

Agency Contacts

Building Name:

FIVE SKYLINE PLACE

DEPARTMENT OF DEFENSE	DOD AREA MANAGER	Sam Ryan	(703) 756-7711	(703) 371-2946
DEPARTMENT OF DEFENSE	DOD BUILDINGS	Ed Fruit	(703) 756-7711	(703) 697-5555
DEPARTMENT OF DEFENSE	ON-SITE	LOLITA JORDON	(703) 681-8707	
DEPARTMENT OF DEFENSE	ON-SITE, RM 810	DION WILLIAMS	(703) 681-8707	
DEPARTMENT OF DEFENSE	ON-SITE	MAC	(703) 681-8707	

DOD
 " DISA - On-site Helen cred - 703-5441
 " " Bob Clapp - 681-2570
 " " Russ Chesten - 681-0249

From: "Balinas Joe C DTHC-Pentagon" <Joe.Balinas@NA.AMEDD.ARMY.MIL> AT internet on 01/27/2000 08:53 AM
To: Patricia L. Gretskey/WPY/RW/GSA/GOV
cc:
Subject: IAQ STUDIES OF SKYLINE 5 9TH FLOOR

Hello Trish :) -- We met with the 9th floor management last Monday p.m., Jan. 24 (before the snowstorm)-

Dr. Leakan, our medical director, myself and Maryann Ramos from CEHS, Pentagon.

Helen Creel (681-0244) and her staff attended the meeting.

Two unresolved issues came

up: 1. need for comprehensive health studies on the impact of the work place IAQ which

CEHS is planning to do involving 200+ employees.

2. need for comprehensive IAQ studies -- room by room of the entire 9th floor.

Will your shop (GSA) handle all IAQ studies?

Has there been follow up IAQ studies done since the initial one of 12 Dec 99 and do you have or know where the results are?

Appreciate very much your help.

////Joe Balinas, CEHS, 697-0850



Michelle D. Coleman

02/02/2000 08:16 AM



To: Patricia L. Gretsky/WPY/RW/GSA/GOV@GSA
cc:

Subject: Funding citation for Skyline #5 - Environmental Survey

Patricia,

The following act number was assigned to the Applied Environmental Contract for the Survey at Skyline Five
P85954621.

REQUISITION/PROCUREMENT REQUEST FOR EQUIPMENT, SUPPLIES OR SERVICES <small>(Instructions on reverse)</small>					PAGE 1 OF 2 PAGES	
2. REQUISITION/PROCUREMENT REQUEST NO.		3. ACT NUMBER		4. DATE PREPARED 01/24/2000		5. JOB/PROJECT NUMBER
6. TO (Stockroom/Contracting office, Name and Location) Applied Environmental 11800 Sunrise Valley Drive, Suite 1200 Reston, VA 20191				7. FROM (Requisitioning office, Name, Symbol, Location and Telephone Number) Safety, Environment, Fire Protection Rm. 2080, 7th & D Streets, SW Washington, DC 20407		
8. FOR INFORMATION CALL (Name and Telephone Number) Trish Gretskey @ 202 708-5254				9. RECEIVING OFFICE (Name, Symbol and Telephone Number) same as #7		
10. ACCOUNTING CLASSIFICATION				11. SHIP TO (Address, Zip Code and Telephone Number) At: Skyline V Building 5111 Leesburg Pike Falls Church VA		
FUND	ORG. CODE	B/A Code	O/C Code			
FUNC CODE	C/E CODE	PROJ / PROS. NO.	CC-A			
W / ITEM	CC-B VA0244ZZ	PRT / CRFT	12. CONTRACT NUMBER GS11P99YAD0719			
ITEM NO. FORM OR STOCK NUMBER (13)	DESCRIPTION OF ARTICLES OR SERVICES (14)		QUAN- TITY (15)	UNIT OF ISSUE (16)	UNIT PRICE (17)	AMOUNT (18)
	Please perform fungicide air, tape, wipe & if appropriate, bulk sampling throughout federal government occupied space. The building has on-going water leak problem (from roof & windows). Health problems, diagnosed by an Occup. Health Physician as being related to exposure to S. atra, have been reported on the 9th floor DISA space. Repeat sampling in areas your firm originally sampled in on behalf of DOD/DISA- conference room, 9182, 9112 (director's office). Also sample room 9113 (recently cleaned). Include 4 areas where a doctor has recommended occupants should be relocated + 5 people visiting doctor this week (info. to be provided by POC or DOD).					
IF ADDITIONAL SPACE IS REQUIRED, USE GSA FORM 49A, REQUISITION/PROCUREMENT REQUEST (Cont)				19. TOTAL AMOUNT INCLUDING CONTINUATION		
20a. TYPED NAME AND TITLE OF FUND CERTIFYING OFFICIAL		21a. TYPED NAME OF REQUISITIONER Trish Gretskey, IH WPY				
20b. SIGNATURE	DATE	21b. SIGNATURE			DATE	
22. LIST ATTACHMENTS		23a. TYPED NAME OF APPROVING OFFICIAL				
		23b. SIGNATURE			DATE	
24. SHIPPED BY <input type="checkbox"/> FREIGHT <input type="checkbox"/> PARCELPST <input type="checkbox"/> EXPRESS <input type="checkbox"/> MAIL						
25. FILLED BY			26. PACKED BY		27. CHECKED BY	
28. BILL OF LADING			29. DATE SHIPPED		ORG.	

**REQUISITION/PROCUREMENT REQUEST FOR
EQUIPMENT, SUPPLIES OR SERVICES (Continuation)**

PAGE OF PAGES

REQUEST/PROCUREMENT REQUEST NO.	ACT NO.	DATE PREPARED			
ITEM NO. FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	<p>In addition to these 13 areas, choose 6 additional areas taking into consideration complaint vs non-complaint, signs of past water damage, & ventilation zones. Collect viable & non-viable air samples (Anderson & Burkhardt) & contact plates in areas where Stachy has been previously identified. Collect surface wipe samples supply or return air diffusers, internal AHU surfaces, water stained areas, etc. as field evidence deems as appropriate. Upon completing the 9th floor, sample other floors w/ DOD occupancy (1, 3, 4, 5, 6, 8). Reported occupancy is as follows: Rms 102, 302, 801, 808, 809 (34,400 sq. ft) Rm. 810 (32,207 sq. ft), Rms 500 & 601 (33,500 sq. ft), 4th flr (28, 672 sq. ft) and Rms. 100, 103, 107 (14, 074 sq.ft.). On all of these floors, randomly choose 10 representative locations to perform fungal sampling (5 locations on the 1st floor since it has a smaller sq. footage).</p> <p>In summary, there will be 19 locations to sample on the 9th floor + Mech areas; 45 locations on other floors; outdoor sampling for each day on site= 66 locations for the entire building.</p>				
0001	IH hours (2 IH's/day) x 7 days (8-hr)	112	hrs	\$38.44	\$4,305.28
0002	CIH hrs (meetings+ oversite)	16	hrs	\$86.43	\$1,382.88
0042	mold/fungal plates (66 loca)	150	ea	\$110.00	\$16,500.00
	<p>POC: Dave Polk/Carl Battenfeld (GSA) (703) 756-6270 Dennis Whitworth (C E Smith) (703) 769-1109 Sam Ryan (DOD) (703) 756-7711</p>				\$0.00

DOUGLAS G. BENTON

02/01/2000 08:44 AM

Sent by: Douglas G. Benton

To: Marcia A. Gross/WPD/RW/GSA/GOV@GSA, Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA
cc: Robert D. Armstrong/WPD/RW/GSA/GOV@GSA, Michael J. Castle/WPD/RW/GSA/GOV@GSA

Subject: Re: Skyline #5 Survey 

Based on yesterday's meeting at Skyline, I authorized more testing that we will have to fund. When Trish gets the proposal we need to go ahead and fund the addition also, thanks.

Marcia A. Gross



Marcia A. Gross
01/31/2000 06:27 PM

To: Michelle D. Coleman/WPD/RW/GSA/GOV@GSA
cc: Douglas G. Benton/WPD/RW/GSA/GOV@GSA, Marcia A. Gross/WPD/RW/GSA/GOV@GSA

Subject: Re: Skyline #5 Survey 

Michelle:

Doug Benton requested that we fund the survey. It is my policy to assign the Act number once the contract is ready that way we have a copy. In the past, Norma Jean has failed to provide copies of the contract. Since she also prepares the receiving report, we never knew when it was obligated or paid. Please follow up with her to get a copy of the contract. I will give you a copy of the GSA 49 that I prevalidated. I had left a message for Roland to give Norma Jean an Act number; however, my request probably got put on the back burner because of the snow days. Thanks for your help.
Michelle D. Coleman



Michelle D. Coleman
01/31/2000 02:08 PM



To: Marcia A. Gross/WPD/RW/GSA/GOV@GSA
cc:

Subject: Skyline #5 Survey

Norma Jean called today in reference to the survey that you requested. She needed an ACT number, so I went ahead and gave her one, assigned to myself.

- 01-07-00 FCA and GSA meet to discuss the status. GSA provides a copy of the cure letter given to CES, dated 01-05-00. GSA gives CES until 01-25-00 to correct the problem.
- 10-07-0 GSA assigns a new GSA Building Manager to handle future actions Regarding Skyline V.
- 01-11-0 FCA receives e-mail from DISA stating urinal in Skyline III/15th floor mens room is leaking and has been for quite some time. Again, DISA employees called CES directly to report problems. FCA reiterates the established procedures for service calls and request DISA to contact FCA not CES.
- 01-11-00 FCA reports urinal problems to CES & GSA. Meet Tina (DoD) & walked the roof of Syline V.
- 01-12-00 Urinal is fixed. Tina (DoD), Bonnie (CES) and Carl (GSA) walked the 9th floor of Sky V w/ Russ and Tracy (DISA) and Tina (DoD).
- 01-13-00 FCA receives faxed copy of 2nd IAQ report. Sam R. , Tina (DoD), Bonnie, CES roofer inspector and roofing contractor walked sky 5 roof. One third of Sky 5 to have new roof put on (George Mason side). All repairs have held up. Will fix caulking on the D.Dir. side.
- 01-14-00 CES called, roofing contract signed. Paper work will follow.
- 01-18-00 Dropped of letter to Sam Ryan (DoD). Meet caulking contractor for CES at 7:30 am. Sky 5, 9th fl. looked at the d. Dir. Office.
- 01-20-00 Conf. Call w/ DoD, GSA about Sky 5, 9th fl. Need IAQ to check out space (CES & GSA) people getting sick and going to doctor saying space is making them sick. Doug Benton (GSA), Kent Womack (DoD) and Brent Bitz (CES) are now running the show.
- 01-21-00 Sky 5, room 9173 gutted of all contaminated material.
- 01-22-00 Sky 5, room 9173 cleaned and washed down Sat., 9am-9pm.
- 01-24-00 Trish Gretskey GSA Safety, DoD Safety and CES Safety to meet at 10:00am. CES will begin cleaning and removal of contaminated surfaces within room 9113. (tentatively) GSA will begin air sampling the entire 9th floor and as a result of the air sample Results culture test will be performed as required. HVAC systems will be tested (surface Swipe method) and cleaned as required based on the test results, this may be Accomplished with a sprayed on germicide. Wall vinyl covering has/will be tested to Include lifting it from the surface. CES has committed to the removal of carpet in Selected areas (spores) do not thrive to any degree in carpet. The following has been accomplished as of 1/24/00: Room 9182, 9112 and the Conference room are cleaned and construction is needed.
- 01-31-00 Meeting at 1:00 at DISA 9th fl. Sky 5 w/DOD & GSA. Testing started Mon.the 31st. The 9th Floor and other areas will be tested. GSA, DOD and CES will walk together checking the floor. Samples will be taken from the HVAC system, walls, vinyl wall paper and the rugs. Will take 8 days to fix roof with good weather. Next meeting on 2/23/00 at 1:30pm. Sky 5 room 901.



**General Services Administration
National Capital Region
Washington, DC 20407**

SKY 5, 9TH FLOOR

02/02/00 DISA called at 2:00pm, water leak in the ceiling in room 9209. Meet with CES & DISA on site. Notified DOD. CES taking care of leak.

02/03/00 Metal refinisher to repair the metal finishes on the damaged window frames. Meet with DOD @ 8:00am on 9th floor.

02/04/00 Structural specialist to inspect window framing structure in conference room 9182, findings to follow. CES, GSA & DOD were on site. GSA DOD checked the progress of the roof replacement, CES states that 20% of the south George Mason Dr. will be complete.

02/05/00 CES to repair drywall, paint and replace ceiling tiles.

Skyline Five- 9th Floor – CES Remediation Summary

As of week ending 2/4/00

- 11/6/99 -Weekend remediation work -performed by Environmental Group, in conference room 9182, offices 9113, 9182, 9189. Removal of drywall and wipe-down of surfaces. In office 9191 exploratory work performed.
- 11/8/99 -Week of -Roofing consultant engaged to discuss course of action for roof repairs. Roofing contractor engaged to repair leaks above conference room, adjacent offices, and office 9112. Caulking contractor engaged to review exterior wall and window joints for possible water penetration. Contractor engaged to provide infrared survey of suspect roof areas to help determine areas for repairs.
- 11/15/99 -Week of – Continue roofing and caulking repairs. Received report from infrared roof survey.
- 11/22/99 -Week of – Performed additional roofing repairs
- 12/6/99 -Week of- Start of Cooling tower roof replacement
- 12/20/99 -Week of- Cooling tower roof replacement completed. Corrects leakage into conference room 9182 and at demising wall locations adjacent to offices 9113 and 9182.
- 1/5/00 -Daytime- CES notified by DOD and GSA that additional offices, 9188, 9189, 9187B, and 9182 experienced water leaks during the evening. CES suspects that intense storm during prior evening, which included driving rains contributed to window leaks in those offices. Roofing and caulking contractor engaged to review and repair areas.
- 1/5/00 -CES performs second round of remediation work in conference room and adjacent offices. Included work in return air plenum in these areas and additional exploratory work.
- 1/19/00 - Start of roof replacement for S. George Mason Dr. side of building. Delayed do to weather conditions. Estimated completion, mid February.
- 1/25/00 - CES performs remediation work in office 9112. Removal of water damage materials and cleaning of surfaces including return air plenum. CES performs work under controlled containment even-though IAQ test results were negative from DOD and CES testing.
- 1/29/00 - CES begins reconstruction of conference room, walls, ceiling, etc...
- 1/31/00 - Future planned remediation work to be performed in ceiling plenum, replace carpeting in offices adjacent to conference room, and complete reconstruction of areas involved in remediation work.
- 2/1/00 - Contractor for window blinds inspects conference room 9182 and adjacent office to provide new window blinds. Original blinds removed during remediation work. Expect materials within 2 weeks.
- 2/2/00 - Reviewed remaining reconstruction items with Mgmt Construction. Construction work planned for Sat. 2/5/00
- 2/3/00 - Metal refinishing contractor inspected window frames to remove calcium stains/deposits. Work pending scheduling.

Feb-02-00 04:46pm From-CE SMITH SKYLINE 703-620-3879 T-495 P 03/03 F-717

- 2/4/00 -Week ending- Approximately 20% of the South George Mason Dr. roof section replacement work has been completed.
- 2/4/00 - Friday 2/4 - Structural specialist inspects window framing structure in conference room 9182, report of findings to follow.

FAXGSA
SKYLINE CUSTOMER SERVICE CENTER

Date

2-3-00

Number of pages including cover sheet

5

To:

Trish Gotsky

From:

CARL W. BATTENFELDBUILDINGS MANAGER

Phone

Fax Phone

CC:

708 6618

Phone

Fax Phone

703 756-6270703 756-6289

REMARKS:

☐ Urgent ☐ For your review ☐ Reply ASAP ☐ Please commentfor your infocheck your voice mailThanksCarl

Skyline Five- 9th Floor – CES Remediation Summary

As of 1/30/00

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- 1/5/00 -**CES performs second round of remediation work in conference room and adjacent offices**. Included work in return air plenum in these areas and additional exploratory work.
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● Patricia L. Gretskey

01/24/2000 02:45 PM

To: Douglas Benton, David C. Polk/WPD/RW/GSA/GOV, Michael Castle, Robert D. Armstrong/WPD/RW/GSA/GOV
cc: Rober Goodman, Steve Richard, Sharon R. Jenkins/WPY/RW/GSA/GOV, Burl Keller

Subject: Skyline V Bldg

As promised in the meeting this morning between DOD, GSA, and CE Smith, I contacted Ling-Ling Hung, a recognized "expert" in the field of microbiology and in dealing with *Stachybotrus atra*. The question from this morning's meeting was to what standard do we work to (especially with regards to clean-up: how much *S. atra* is too much) and what do we do if *S. atra* is found in settled dust in the return air plenum?

She talked about the New York Clean-up recommendations of which was apparently being misinterpreted in the meeting this morning. The numbers alluded to in the recommendations dictate when occupants should be immediately moved out. However, she stated that if we are acting based on finding evidence *S. atra* exists, resampling accepts zero tolerance. If you are still finding it after cleaning, an amplification source still remains.

With regards to the return plenum, she stated that if *S. atra* is found in settled dust, it is an extension of the amplification site. This area should be cleaned as well.

Ling-Ling hung is with the Public Health service (FEOH) (215) 861-4113. Please forward this response on to DOD and Dennis Whitworth. I informed Ling Ling that Dennis may wish to discuss the issue further or seek confirmation on the above personally.

I am not sure if I will be available for the Wednesday meeting at this time but will try to do so. If I can not attend, someone will be there in my place. Please forward meeting information to Burl Keller & Steve Richard as well for the remainder of this week. I can be reached on 202 708-5254.

DOUGLAS G. BENTON

01/21/2000 04:13 PM

Sent by: Douglas G. Benton

To: "Womack Kent WHS/REF" <KWomack@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, David C. Polk/WPD/RW/GSA/GOV@GSA, Robert D. Armstrong/WPD/RW/GSA/GOV@GSA, Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA
cc: Michael J. Castle/WPD/RW/GSA/GOV@GSA, "Higgins Brian P J WHS/REF" <BHiggins@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Langone Michael WHS/REF" <mlangone@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Burrell Jake WHS/REF" <JBurrell@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Gillson Pete WHS/REF" <pgillson@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Proctor Linda" <LProctor@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ryan Sam" <SRyan@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Fruit Ed" <EFruit@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ratcliffe Mary" <MRatcliffe@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, Vincent S. Diportanova/WPD/RW/GSA/GOV@GSA

Subject: Re: FW: RESULTS OF WALK-THROUGH TODAY OF SKYLINE 5, 9TH FLOOR SP 

Mike Castle just informed me the DOD, GSA Safety folks are going to walk the space at 10 AM Monday with the CES IAQ contractor. I am forwarding this to our Safety person, Trish Gretskey and also to Vince Diportanova and Dave Polk, between the three of them we can take a look on Monday and also bring this to CES's attention asap.

Mike also reported CES cleaned up room 9181 - the Director's office - last night and have more work scheduled for over the week end.

I suggest I call you late Monday, around 3 PM and we go over where we are at, we will include our team in on the conference call. At that time we can confirm the Wednesday meeting, tentatively set for 1 PM at Skyline V. Thanks

From: "Womack Kent WHS/REF" <KWomack@osd.pentagon.mil> AT internet on 01/21/2000 03:31 PM

From: "Womack Kent WHS/REF" <KWomack@osd.pentagon.mil> AT internet on 01/21/2000 03:31 PM
To: Douglas G. Benton/WPD/RW/GSA/GOV, Michael J. Castle/WPD/RW/GSA/GOV
cc: "Higgins Brian P J WHS/REF" <BHiggins@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Langone Michael WHS/REF" <mlangone@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Burrell Jake WHS/REF" <JBurrell@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Gillson Pete WHS/REF" <pgillson@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Proctor Linda" <LProctor@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ryan Sam" <SRyan@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Fruit Ed" <EFruit@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ratcliffe Mary" <MRatcliffe@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01

Subject: FW: RESULTS OF WALK-THROUGH TODAY OF SKYLINE 5, 9TH FLOOR SP

Doug,

The supervisor of our Agency Contact and her supervisor walked the space today per the attached message. Note that they listed the room numbers where they think there are problems and mention the vinyl wall covering. Do their room

numbers agree with the GSA list of rooms that need attention? Is Smith going to check behind the vinyl? I don't know what the "something" is she referred to as being on the metal frames and beams but I suppose we will see when we do the on-site visit next week. Hopefully Smith will address all the areas they are concerned about this weekend.

-----Original Message-----

From: Shepherd, Ina [mailto:ShepherI@ncr.disa.mil]
Sent: Friday, January 21, 2000 2:20 PM
To: 'sryan@osd.pentgon.mil'
Cc: Creel, Helen; Thoma, Thomas; Boyd, Jeanette; Sydnor, Bruce;
'tamerica@osd.pentgon.mil'; 'lproctor@osd.pentagon.mil';
'kwomack@osd.pentagon.mil'; 'efruit@osd.pentagon.mil'; Shepherd, Ina;
'rtownsend@osd.pentagon.mil'
Subject: RESULTS OF WALK-THROUGH TODAY OF SKYLINE 5, 9TH FLOOR SPACE
Importance: Low

Mr. Ryan,

I would like to start out by thanking you and Tina America for the package you provided, I haven't had a chance to look at it yet, but will do so shortly.

As stated when we stopped by your office today, Mr. Thoma, COL Sydnor and myself were going to the 9th floor to walk around with Ms. H. Creel and look at all the areas that have been identified with environmental problems. Ms. Creel was so helpful in providing us with a floor plan and marking the plan with the following room numbers:

9096	9097	9098	9118	9131	9126	9121
9181	9182	9187B	9188			
9189	9193	9191	9173			

Room 9112 was cleaned up last night by C.E. Smith personnel, but it didn't appear they completed all the work, there was something on the metal framing around the windows and beams. Ms. Creel advised during the walk through that the Pentagon Civilian Health Clinic, Doctor M. H. Leakan advised that if there was vinyl wall covering, in any of the areas, which there is in room 9112, it would have to be removed as well. Are there plans to remove carpet and padding? The inspection revealed in many areas that the window casing/frames and beams had the paint eaten away, which brings up another concern about the possibility of metal structure failure (the safety of the windows supported by the metal structure).

Please advise of your next course of action planned for this floor, the rooms listed above and room 9112. I can be reached at 703-607-4466. Again, thank you for your consideration in this matter.

v/r
Ina

MEMORANDUM

TO: Craig Gerardi

FROM: Jonathan N. Schatz *JNS*

DATE: January 21, 2000

RE: Skyline 5 - 9th Floor
Progress Report on Fungal Investigation

This memo is intended to summarize our current information regarding issues resulting from roof leaks above the 9th floor office area of Skyline 5, specifically the presence of *Stachybotrys chartarum*, and our recommended corrective actions. AAS Environmental, Inc. (AASE) is currently performing extensive sampling to determine the extent of the problem, while Building Management works toward repairing the roof leaks in the office area.

AASE was first informed of the discovery of fungal growth in the vicinity of the 9th floor conference room on November 5, 1999. On November 6, 1999, affected areas of drywall were removed from this conference room, Room 9183 and Room 9113. This work was performed by The Environmental Group, a professional environmental remediation firm. Subsequent testing by the tenant's environmental consultant on December 2 and 3, 1999, showed low levels of *Stachybotrys chartarum* on some surfaces in the conference room and Room 9182, and low airborne levels of this fungus in these same rooms. *Stachybotrys chartarum* was also identified above the suspended ceiling in the return air plenum.

Accessible surfaces in these offices were professionally cleaned on January 5, 2000 by The Environmental Group. On January 6, AASE performed sampling of the air and dust in this suite to determine the extent of the problem. A second phase of sampling is currently being scheduled. Our findings to date are outlined below:

- Seven of the eight viable air samples collected in the office showed no *Stachybotrys chartarum*. These samples were collected in the conference room and Rooms 9113, 9110, 9187, 9148, 9189, and 9112. The sample collected in Office 9182 showed a very low total fungal count of 28 colony forming units per cubic meter (cfu/m), of which only 34% was *Stachybotrys chartarum*. This level is not expected to pose a health hazard to area occupants.
- Surface wipe samples collected from the large table in the conference room and the window sill in Room 9182 showed no *Stachybotrys chartarum*.
- A total of nineteen surface wipe samples were collected at varying distances from the perimeter wall in the conference room and Rooms 9112, 9187, 9182, 9113, and 9110. Test results showed *Stachybotrys chartarum* is present in varying concentrations above the conference room, Room 9182 and Room 9113. These rooms are the same areas where the initial growth was identified and removed on November 6, 1999, however, the areas above the ceiling were not cleaned at that time.

Craig Gerardi
Skyline 5 - 9th Floor
Progress Report on Fungal Investigation
January 21, 2000
Page 2

- Surface wipe samples were collected at the two grills where return air for the affected area enters the main building return air shaft. *Stachybotrys chartarum* was detected on the return air grill located above the water fountains in the common hallway outside the tenant space.
- Three surface wipe samples were collected from inside the supply air ducts above the conference room, Room 9190 and Room 9118. No *Stachybotrys chartarum* was isolated in these samples.

While AASE intends to perform additional testing, available data and our visual inspections indicate the following:

- The air and surface wipe samples collected in the occupied office areas and the supply air ducts does not indicate an exposure hazard to area occupants.
- No additional reservoirs of *Stachybotrys chartarum* have been found. Spores isolated in these tests have been in settled dust, and their locations and concentrations indicate that they probably originated from the previously removed growth in the vicinity of the conference room.
- *Stachybotrys chartarum* spores are present in varying concentrations above the suspended ceilings of the conference room, Room 9182 and Room 9113. Spores were also identified at the main return air grill in the common hallway above the suspended ceiling at the water fountains. At this time, these spores are assumed to exist in the roughly triangular area above the suspended ceiling ranging between Rooms 9182, Room 9113, and this return air grill. Ceiling tiles in this area should not be disturbed by building engineers or outside contractors until cleaning is completed.

AASE plans to perform additional surface wipe testing above the suspended ceilings to further define the extent of the area requiring cleaning. Further investigation and repairs are also required to correct the water infiltration in Rooms 9112, 9187, 9188, and 9189. A full report will be issued upon completion of this study, which will include all laboratory reports and clearance sampling.

If you have any questions, please feel free to call me at 703/769-1045.

JNS/cmb

cc: Jim Foster
404-4.7

Environmental Group

January 20, 2000

Mr. Jonathan Schatz
Consolidated Engineering Services, Inc.
2345 Crystal Drive, Suite 1000
Arlington, VA 22202

Re: Skyline 5, 9th Floor

Dear Mr. Schatz:

This letter summarizes the limited inspection that was conducted at Skyline 5, 9th floor on January 5 and review of the Applied Environmental report dated December 17, 1999.

I reviewed the Applied Environmental Report for the occupied space. A review of the sampling data indicates that the airborne concentration of *Stachybotrys chararum* was 7 cfu/m³. This level is below the New York City Department of Health levels of 10³ to 10⁴ cfu/m³ recommended for evacuation of the site.

Currently there is no Federal, State, or local regulation establishing limits for exposure to *Stachybotrys chararum*; therefore, recommendations must be based on the current research and publications. The Environmental Group follows the Guidelines on Assessment and Remediation of *Stachybotrys Atra* (*chararum*) in Indoor Environments published by the New York City Department of Health. Current recommendations state that when *Stachybotrys chararum* is identified in an air sample there should be immediate action to locate the water source and the fungal site. First eliminate the water source. Once the fungal site is identified, arrangements should be made for controlled and contained remediation during nonoccupancy periods.

The Applied Environmental report identifies *Stachybotrys chararum* in air and wipe samples collected in two rooms on the ninth floor. *Stachybotrys chararum* is considered an indicator fungal species that signals the presence of moisture in an area and it has a *potential* for causing health problems. *Stachybotrys chararum* does produce mycotoxin, and it has been "loosely associated with adverse health effects."

Although three rooms were sampled for fungi and bacteria, the analytical results are not statistically meaningful to evaluate potential exposures on the entire floor. In addition, samples should also have included the supply duct and common areas. It would be difficult to say the dissemination of spores is extensive beyond the confines of the two

12207 Distribution Way • Beltsville, MD 20705
Phone: (301) 937-3255 • Fax: (301) 937-3611

rooms, when the sampling outside of these areas *does not* identify *Stachybotrys chartarum*.

The report implies that there has only been a partial removal of wet and water-damaged building material and yet there is no indication that moisture levels were recorded to identify the additional impacted sheet rock. Furthermore, the identification of *Stachybotrys chartarum* in the sampling conducted in the return air plenum suggests only that additional investigation be conducted. It is not reasonable to assume that the removal of the wet drywall caused the dissemination of spores in the return air plenum particularly since the sampling was conducted 4 weeks after remediation procedures. This report only identifies a concern within the two rooms and a need for further investigation and testing.

The inspection conducted by The Environmental Group, on January 5th, identified evidence of previous water leaks and additional areas for investigation. In order to fully address this issue of *potential* exposure it would be prudent to conduct additional air and wipe tests that would be more statistically representative of the entire office space.

In addition to the inspection on January 5, remediation activities were conducted in the two rooms identified in the report. The remediation activities included hepa vacuuming of all surfaces below the drop ceiling, followed by a wipe down with a biocide.

If there are occupant concerns, medical evaluations should only be conducted by physicians trained in occupational/environmental medicine or related specialties and knowledgeable about these types of exposure. Decisions about removing individuals from an affected area must be based on the results of such medical evaluation, and be made on a case by case basis.

If you should have any questions or require additional information please do not hesitate to contact me.

Sincerely,

(b) (6)

Gwendolyn H. Franco
Principal Environmental Consultant

01/21/00

17:11

703 235 1139

NOVA PMC

001/009

Phone: 703-769-1109

Fax: 703-769-1190

Trish Loretsky
202 708 6618

Charles E. Smith
Companies

Fax

To: Michael Castle

From: Dennis Whitworth 703-769-1109

Fax: 703-235-2357

Date: January 21, 2000

Phone:

Pages: 7

Re: DISA IAQ

CC:

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

•Comments: Attached is a letter from Brint Bliz, a letter from Gwendolyn Franco, the Environmental Consultant, and a memo from Jonathan Schatz, our environmental specialist. I will call you following our Friday morning staff meeting to discuss setting up a meeting someday next week.

P. 001

JAN - 21 00 (FRI) 10:08

**CHARLES E. SMITH COMMERCIAL REALTY**

January 21, 2000

Via Fax #703-235-2357

Mr. Michael Castle
General Services Administration
NCR
Nova Property Management Center
901 North Stuart Street
Arlington, VA 22203

Dear Mr. Castle:

Further to our discussions, attached please find the following material:

- (a) Letter dated January 20, 2000 from the Environmental Group with regards to the air quality testing on the 9th floor of Skyline 5.
- (b) Memorandum dated January 20, 2000 from Jonathan Schatz, Environmental Consultant for AAS Environmental, Inc. with regards to his investigations concerning the indoor air quality issue on the 9th floor of Skyline 5.

I would firstly like to state that our company continues to be committed to working with the GSA and the Department of Defense in resolving this issue. As you are aware, we are in the process of replacing the entire roof of the building, an action which will stop all further water infiltration. In addition, we continue to perform remediation and cleaning activities.

After reviewing the attached material, it is our position that there does not appear to be a health hazard associated with indoor air quality on the 9th floor of Skyline 5. The Environmental Group's letter indicates that the identified levels of *Stachybotrys chararum* are far below levels which would indicate a need to vacate the premises.

In our continuing effort to work with you on this issue, I would suggest that we arrange to have our respective professional and environmental staff meet as early as possible, perhaps Monday, January 24th. The purpose of this meeting would be to mutually review all of the outstanding test data which has been produced both by GSA and Smith. Hopefully any issues of test methodology or interpretation of results can be cleared up at this meeting.

2345 CRYSTAL DRIVE ■ CRYSTAL CITY ■ ARLINGTON, VIRGINIA 22202 ■ 703-920-8500

January 21, 2000
Mr. Michael Castle
Page 2

You indicated that you would like to hold a meeting with Smith, Department of Defense occupant clients and yourself on Wednesday, January 26th. Of course, we would be pleased to attend. I believe that it would be beneficial to agree upon an agenda for the meeting so that we can make this meeting productive to all attendees. While I will continue to personally monitor all the activities related to this issue, if I am unavailable, please do not hesitate to deal directly with Mr. Dennis Whitworth, our Vice President, who is responsible for the oversight of the Skyline City office complex. Mr. Whitworth can be contacted directly at 703-769-1109.

Sincerely,
CHARLES E. SMITH COMMERCIAL REALTY

(b) (6)

Brent W. Bitz
Executive Vice President
Management Services Department

DOUGLAS G. BENTON

01/20/2000 05:30 PM

Sent by: Douglas G. Benton

To: Robert W. Goodman/WP/RW/GSA/GOV@GSA
cc: Robert D. Armstrong/WPD/RW/GSA/GOV@GSA, Michael J. Castle/WPD/RW/GSA/GOV@GSA, Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA

Subject: Heads up - Skyline V Indoor Air Quality

The situation with reported stachybotrys spore contamination on the 9th floor of our leased location at Skyline V is potentially worse at this point. Until now, reports were that satisfactory progress was being made and GSA, DOD/DISA, and CE Smith were in agreement with the progress to date.

Previously only two DISA employees were relocated due to roof and window leaks that resulted in wet walls documented to have stachybotrys, reports now as of January 19, 2000 that up to 14 DISA employees have sought care from the DOD Pentagon Health Clinic run by PHS. A DISA management official reports that if the PHS Doctor sees that more than 10% of the floor population reports stachybotrys related ailments, a total of 15 people of 150, then the medical recommendation will be to vacate the 35,000 sf floor. Stachybotrys can cause flu like symptoms and in a serious contamination is a health hazard. It grows in wet media such as wet walls and wet carpet, but is normally found in the atmosphere at some background level.

We have a game plan, but here is a short background of the critical dates, we have a full chronology.

September 14, 1999 Documented report of roof leaks in the space, CE Smith, the lessor, started roof repairs. Numerous exchanges of requests and responses were made between DISA, GSA, CE Smith. Some participants say the roof leaks have been reported and fixed for several years.

November 5, 1999 Results of a test conducted October 20, 1999 by an IAQ contractor under DOD contract was positive for stachybotrys in wet walls on the 9th floor of the building. That same date and over the week end the first CE Smith clean up of the area was done to remove wet walls, but roof work did not start yet as they were lining up a contractor.

December 21, 1999 Results of a second DOD ordered IAQ test done December 3 showed airborne stachybotrus. The same day all parties met and a cure letter was issued to CE Smith. Roof repairs started but over the next several days were not successful in stopping leaks.

January 5, 2000 DISA notified DOD and GSA of unsatisfactory progress, noted that it has been several months to get to this point. CE Smith was notified and cleaned the space again. Progress was then reported to be OK by the involved organizations.

January 6, 2000 CE Smith conducted IAQ tests and verbally reported January 20, 2000 the test shows satisfactory for contamination, meaning the space is clean, they are providing the report to GSA and DOD for review.

January 19, 2000 DISA informed DOD Washington HQ Service that more people are going to the doctor and may reach the critical number of affected people to trip the relocation recommendation from the PHS Doctor. DOD informed GSA.

January 20 (Today) We conducted a teleconference call with all elements of DOD headed up by Kent Womack and subsequently with all elements of CE Smith headed up by Brent Bitz,

Senior Vice President and formed an agreed-to action plan.

Action Plan

CE Smith will provide copies of their last IAQ report to GSA/DOD for verification of the results showing the space is cleaned. The report is needed before next Wednesday, but will be provided as soon as they have it in writing.

GSA will commission an IAQ study on all floors of Government occupancy, Trish Gretskey GSA Safety and Health, will place the order using NOVA funding.
(Stachybotrys testing requires 12 days incubation in the laboratory before results are known.)

CE Smith, Brent Bitz, is reviewing all their actions to date and will report later today to GSA what they can do to meet their commitments sooner. They had sent a letter in yesterday confirming an earlier verbal report they have decided they can no longer do roof repairs, but need to do replacement on 1/3 of the roof and need until Feb 18 to do so. He will verify all schedules to try and do it faster, plus again ask his IAQ contractor what work should proceed and discuss with the Government. CE Smith is sending people to the building again tonight to do more clean up and to check for wet walls and other areas.

DOD, GSA, and CE Smith will confer Monday, January 24 and will then ask DISA to meet with us all on Wednesday January 26 at Skyline V to report all findings to date, to go over the action plan, to ensure we have all issues addressed, and to start planning Plan B if we have to relocate.

NOVA is now looking at the move out scenario (Plan B) with both CE Smith and DOD/DISA in case we fail more tests or if the PHS recommendation says move out. A move would be very disruptive to DISA, but may be necessary. If so the lessor would be given an opportunity to handle it and if not GSA would fund for a move and settle with CE Smith later by whatever action is necessary.

Although everyone stands committed to escalate and speed up the cure, and to ensure everyone understands the action plan, the plan may not preclude a move out recommendation by the medical authority.

I may be reached on 202-708-7621 if any questions.

Mike Castle

TIMELINE OF EVENTS
SKYLINE V. 9TH FLOOR WATER DAMAGE

*1/14/00**wet walls
water damage*

- 09-14-99 DISA informed FCA of problem. (DISA had been reporting the problem directly to CES & GSA, bypassing FCA).
- 09-14-99 FCA reported problem to CES & GSA.
- 09-16-99 FCA sent e-mail to GSA requesting a status and follow-up.
- 09-16-99 FCA reported problem to CES 2nd time.
- 09-16-99 FCA sent e-mail to GSA requesting walk-thru meeting in Skyline V/9th floor.
- 09-21-99 FCA sent e-mail to GSA requesting the same as above – still no response.
- 09-22-99 FCA receives e-mail from GSA stating GSA walked thru the space (without FCA), took pictures of the damage and would send letter to CES to correct the problem.
- 09-22-99 FCA sends e-mail to GSA still requesting a walk-thru of the space with GSA, CES, FCA, & DISA.
- 09-24-99 FCA receives e-mail from DISA requesting information on how to go about getting OSHA to conduct a survey of the space.
- 09-24-99 FCA responds to DISA via e-mail stating to send a memorandum to FCA requesting IAQ services and FCA would coordinate the survey with WHS Safety Office.
- 10-01-99 FCA receives DISA's memorandum requesting IAQ of space.
- 10-06-99 FCA sends official request to WHS Safety Office requesting IAQ.
- 10-06-99 FCA sends e-mail to DISA & GSA providing status of service call to include Sky V/9th floor issues. FCA states FCA is still waiting for a copy of the letter from GSA to CES, requests status of letter from GSA and states FCA is coordinating an IAQ of the space with the WHS Safety Office.
- 1st IAQ*
10-13-99 FCA receives call from WHS Safety Office contractor to coordinate IAQ.
- 10-20/21-99 IAQ tests conducted.

12-17-99 CES requests after-hours/weekend access to space. FCA coordinates with DISA.

12-20-99 DISA informs FCA that CES never showed up in space. DISA is displeased and states after-hour arrangements will not be possible again until after the holidays.

12-20-99 FCA investigates why CES did not show up in space. CES states they worked on the roof but did not need to get into space after all and apologizes for not informing DISA & FCA. FCA notifies CES that after-hour access to the space will not be provided until after the holidays.

Big mtey
w/ GSA
12-21-99 Meeting with GSA, CES, FCA, SOHO & DISA to discuss progress of resolution.

12-21-00 FCA receives faxed copy of 2nd IAQ results (portion).

12-22-99 LFD informs RE&F of status.

01-03-00 CES continues repair work on the roof and windows.

01-05-99 Hard rains occurred overnight. Additional leaks noted.

01-05-99 FCA sends e-mail to GSA expressing both FCA's and DISA's dissatisfaction with the progress of the corrective measures being taken by CES & GSA to remedy the problem. FCA states the space can not be fully utilized in its present condition. FCA requests GSA coordinate a meeting to discuss.

01-05-99 FCA receives e-mail from GSA stating they will meet with the lessor to get an update on the repairs and find out what can be done to make the space habitable.

01-05-00 CES cleans area again.

01-06-99 FCA receives e-mail from GSA stating CES will have roofers on the roof this week to determine where leaks are coming from. GSA also states a cure letter will be sent to CES regarding the issue (5 months after DoD contacted GSA and 17 months after DISA contacted GSA about the problem).

01-07-00 FCA sends e-mail to CES (cc: all parties) requesting abatement plan and schedule.

01-07-00 FCA receives CES's abatement plan and schedule via e-mail.

11-05-99 FCA receives call from WHS Safety Office verbally informing FCA of the IAQ results. WHS Safety Office states a fungus called Stachybotrys chartarum has been detected and all affected areas should be evacuated and closed to the public.

Removal & Cleanup
11-05-99 FCA coordinated with DISA to close the area and arranged removal of contaminated materials and clean-up (with biocides) over the weekend.

11-05-99 FCA informs LFD of the status.

11-08-99 FCA receives cc of e-mail from Mr. Thoma requesting break in rent bill.

11-09-99 FCA sends e-mail to all parties to provide an update. Contaminated materials removed, area cleaned with biocides, CES arranging to have infrared procedure done on the roof to determine where penetrations in the roof are located.

11-12-99 DISA informs FCA water is leaking again.

11-12-99 FCA informs CES & GSA that water is leaking again.

11-12-99 CES states the cause was a loose u-joint in the water supply line to the UV system in the cooling tower.

11-19-99 CES obtaining roof contractor.

11-19-99 FCA sends e-mail to all parties to provide an update. CES waiting for roof contractor to provide a schedule. Roof under the cooling tower will be replaced and repairs will be done in other areas. Drywall will be replaced when problem is 100% corrected.

12-01-99 CES informs FCA a roof contractor has been secured. CES would like to start on 12-06-99. Roof replacement will take approximately one week. Roof repairs will begin immediately after.

12-01-99 FCA sends e-mail to all parties with the update as stated above.

2nd IAQ
12-03-99 Additional IAQ tests are conducted.

12-06-99 Due to inclement weather roof replacement is delayed.

12-07-99 CES reschedules roof replacement.

12-17-99 Hard rains occurred overnight. Additional leaks noted. Clean up arranged.

CE Smith 20000109
1st to be

Michael J. Castle
01/20/2000 03:42 PM

To: Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA
cc:

Subject: Skyline V, 9th floor IAQ

----- Forwarded by Michael J. Castle/WPD/RW/GSA/GOV on 01/20/2000 03:43 PM -----

From: "Womack Kent WHS/REF" <KWomack@osd.pentagon.mil> AT internet on 01/20/2000 02:37 PM
To: Douglas G. Benton/WPD/RW/GSA/GOV
cc: "Bennett Linda WHS/REF" <LBennett@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Langone Michael WHS/REF" <mlangone@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Higgins Brian P J WHS/REF" <BHiggins@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Burrell Jake WHS/REF" <JBurrell@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Gillson Pete WHS/REF" <pgillson@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Haselbush Paul WHS/REF" <phaselbush@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, Michael J. Castle/WPD/RW/GSA/GOV, "Fruit Ed" <EFruit@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ratcliffe Mary" <MRatcliffe@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Proctor Linda" <LProctor@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ryan Sam" <SRyan@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01

Subject: Skyline V, 9th floor IAQ

Doug,

As a result of our 12:30 PM conference call this date:

1. Sam Ryan is calling Ina Shepherd, the supervisor of our Skyline V Building DISA contact, to inform her of that actions you stated GSA would take to include (a) working with Charles E. Smith (CES) to get a written copy of their IAQ test that indicates there is no longer an IAQ problem, (b) determining what further action CES will be taking, and (c) ordering an IAQ test of the entire building through the GSA IAQ contractor to confirm whether there is an IAQ anywhere in the building. Sam will also ask Ina if DISA can arrange access for and attend an on-site meeting so the space in question can be jointly reviewed by DISA, GSA, DOD and possibly CES staff office representative for an assessment of progress. He will tentatively set it up for next Wednesday but the meeting date is dependent upon developments this weekend and when we get a written report of the CES IAQ. He will also tell her that the verbal report from CES was that there is no longer a problem but GSA is asking for a written report.

2. I called Mike Langone, DOD safety office (SOHB) and told him to hold our 1-18-00 request for an additional IAQ since GSA will be ordering one through your IAQ contractor. Mike agreed but asked that his office (SOHB) be forwarded a copy of the CES IAQ and that they be included in the on-site walk through whenever it is scheduled.

By the way, when I called Mike he advised that he had received a copy of a Pentagon Civilian Employees Health Service (CEHS) clinic report on an employee who works on the 9th floor of Skyline V. The person was seen on 1-14-00 and was complaining about what turned out to be an upper and lower respiratory infection. The CEHS treated the employee and recommended that they work in an alternate work site until the conditions on the 9th floor are corrected.

I think the conference call was a step in the right direction and should help get this situation back on track. Please forward a copy of your action plan as soon as it is available, by e-mail if possible.

Michael J. Castle
01/20/2000 03:39 PM

To: Patricia L. Gretskey/WPY/RW/GSA/GOV@GSA
cc:

Subject: FW: ENVIRONMENTAL ISSUES AND POSSIBLE SPACE ISSUES AT SKYLIN

----- Forwarded by Michael J. Castle/WPD/RW/GSA/GOV on 01/20/2000 03:40 PM -----

From: "Womack Kent WHS/REF" <KWomack@osd.pentagon.mil> AT internet on 01/19/2000 03:11 PM
To: Douglas G. Benton/WPD/RW/GSA/GOV
cc: Michael J. Castle/WPD/RW/GSA/GOV, "Langone Michael WHS/REF" <mlangone@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Higgins Brian P J WHS/REF" <BHiggins@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Gillson Pete WHS/REF" <pgillson@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Haselbush Paul WHS/REF" <phaselbush@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ryan Sam WHS/REF" <SRyan@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Proctor Linda WHS/REF" <LProctor@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "America Tina WHS/REF" <TAmerica@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Fruit Ed WHS/REF" <EFruit@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01, "Ratcliffe Mary WHS/REF" <MRatcliffe@osd.pentagon.mil> AT internet@ccMTA-GEMS-MTA-01

Subject: FW: ENVIRONMENTAL ISSUES AND POSSIBLE SPACE ISSUES AT SKYLIN

Doug,

As you can see from the message below, this situation is getting more serious politically if not in actuality. Has GSA or anyone else gotten any test results back that can calm their concern? I know you said you would forward any test results as soon as you got them so I have to assume you haven't gotten any yet. But can you put some pressure on your IAQ contractor for a report before this escalates any further? We need some hard evidence that there isn't a problem or this thing will just continue to mushroom. As Ina Shepherd indicates below, the Director of the Civilian Clinic at the Pentagon is recommending that the occupants relocate from the 9th floor. That would involve about 35,000 sq. ft. of space and about 150 people.

Curtis Thomas' 1-5-00 cure letter indicates Charles E. Smith was notified of the problem some time ago but does not say when. Was it in writing. If constructive eviction becomes an issue, when can the government say the lessor was officially notified of the problem?

-----Original Message-----

From: Shepherd, Ina [mailto:ShepherI@ncr.disa.mil]
Sent: Wednesday, January 19, 2000 2:28 PM
To: 'SRyan@osd.pentagon.mil'
Cc: 'tamerica@osd.pentagon.mil'; 'lproctor@osd.pentagon.mil'; 'kwomack@osd.pentagon.mil'; 'efruit@osd.pentagon.mil'; 'rtownsend@osd.pentagon.mil'; Thoma, Thomas; Stern, Scott; Sydnor, Bruce;

Creel, Helen; Boyd, Jeanette; Shepherd, Ina
Subject: FW: ENVIRONMENTAL ISSUES AND POSSIBLE SPACE ISSUES AT
SKYLINE 5, 9TH FLOOR
Importance: Low

> -----Original Message-----

> From: Shepherd, Ina
> Sent: Wednesday, January 19, 2000 12:41 PM
> To: 'sryan@pentagon.osd.mil'
> Cc: 'tamerica@pentagon.osd.mil'; 'lproctor@pentagon.osd.mil';
> 'kwomack@pentagon.osd.mil'; 'efruit@pentagon.osd.mil';
> 'rtownsend@pentagon.osd.mil'; Thoma, Thomas; Stern, Scott; Boyd, Jeanette;
> Shepherd, Ina; Creel, Helen; Sydnor, Bruce
> Subject: ENVIRONMENTAL ISSUES AND POSSIBLE SPACE ISSUES AT SKYLINE 5,
> 9TH FLOOR
> Importance: Low

> Mr. S. Ryan,

>
> As discussed and agreed upon yesterday, we are following the chain of >
command. We are forwarding this alert message to advise you that the > entire
9th floor may be contaminated. This information is provided to you
> and others listed, as the requirements cross over areas of
> responsibility.

>
> Based on a report read by the Doctor at the Pentagon Civilian Health >
Clinic. If more than 10% (15 people) of the personnel are affected by the >
current environmental conditions on the 9th floor, of Skyline 5, as the
> result of the roof leaks, his recommendation would be to identify
> alternate work space for the DISA personnel located at Skyline 5, 9th >
floor (SPACE REQUIREMENT).

>
> Background: To date, two of the DISA personnel have been relocated.
> There have been three DISA personnel who have gone to the Pentagon
> Civilian Health Clinic and another two are scheduled to go this week and >
there are another seven scheduled to go sometime this week and next week. >
These personnel are scattered throughout the floor. Many of the personnel >
examined already are experiencing respiratory problems and some already >
suffer from other health conditions and the environment is contributing to >
their already existing health conditions per the doctor.

>
> We are aware of on-going efforts to test the spaces, and we know you are >
waiting for the results of these tests. We would like to receive copies > of
the test results upon your receipt (ENVIRONMENTAL TESTING). Please > make
sure these tests include the areas that have environmental problems > as well
as those that do not.

>
> If relocations occur we would expect any and all costs to be reimbursed.

>
> If you need to get in touch with me my telephone number is
> 703-607-4490/4466. I will be out of the office all day 1/20/00 for
> training, but Mr. Scott Stern will be available in my absence at

> 703-607-4469. Thank you in advance for your consideration in this matter.

>

> v/r

> Ina

>

>

>

FAX

GSA
SKYLINE CUSTOMER SERVICE CENTER

2ND Report

Date 1-20-00
Number of pages including cover sheet ~~22~~ 23

To: *Mike Cotte*

From: CARL W. BATTENFELD
BUILDINGS MANAGER

Phone _____
Fax Phone _____
CC: _____

Phone 703 756-6270
Fax Phone 703 756-6289

REMARKS:

☒ Urgent ☐ For your review ☐ Reply ASAP ☐ Please comment

Urgent

Ryan, Sam, , WHS/REF

From: Womack, Kent, , WHS/REF
Sent: Wednesday, January 19, 2000 3:17 PM
To: Higgins, Brian P J, , WHS/REF
Cc: Langone, Michael, , WHS/REF; Gillson, Pete, , WHS/REF; Fruit, Ed, , WHS/REF;
Ryan, Sam, , WHS/REF
Subject: FW: ENVIRONMENTAL ISSUES AND POSSIBLE SPACE ISSUES AT SKYLINE 5,
9TH FLOOR

Importance: Low

Brian,

As you can see from Ina's message below, we need some hard facts about whether there is a significant problem or not. Can you put some pressure on our IAQ contractor to give us some test results? It doesn't take more than a week to grow a culture does it? Didn't SEMD order some tests over a week ago?

-----Original Message-----

From: Shepherd, Ina [<mailto:ShepherdI@ncr.disa.mil>]
Sent: Wednesday, January 19, 2000 2:28 PM
To: 'Sryan@osd.pentagon.mil'
Cc: 'tamerica@osd.pentagon.mil'; 'lproctor@osd.pentagon.mil';
'kwomack@osd.pentagon.mil'; 'efruit@osd.pentagon.mil';
'rtownsend@osd.pentagon.mil'; Thoma, Thomas; Stern, Scott; Sydnor, Bruce; Creel,
Helen; Boyd, Jeanette; Shepherd, Ina
Subject: FW: ENVIRONMENTAL ISSUES AND POSSIBLE SPACE ISSUES AT SKYLINE 5,
9TH FLOOR
Importance: Low

> -----Original Message-----

> From: Shepherd, Ina
> Sent: Wednesday, January 19, 2000 12:41 PM
> To: 'sryan@pentagon.osd.mil'
> Cc: 'tamerica@pentagon.osd.mil'; 'lproctor@pentagon.osd.mil';
> 'kwomack@pentagon.osd.mil'; 'efruit@pentagon.osd.mil';
> 'rtownsend@pentagon.osd.mil'; Thoma, Thomas; Stern, Scott; Boyd, Jeanette;
> Shepherd, Ina; Creel, Helen; Sydnor, Bruce
> Subject: ENVIRONMENTAL ISSUES AND POSSIBLE SPACE ISSUES AT SKYLINE 5,
> 9TH FLOOR
> Importance: Low
>
> Mr. S. Ryan,
>
> As discussed and agreed upon yesterday, we are following the chain of
> command. We are forwarding this alert message to advise you that the
> entire 9th floor may be contaminated. This information is provided to you
> and others listed, as the requirements cross over areas of
> responsibility.
>
> Based on a report read by the Doctor at the Pentagon Civilian Health
> Clinic. If more than 10% (15 people) of the personnel are affected by the
> current environmental conditions on the 9th floor, of Skyline 5, as the
> result of the roof leaks, his recommendation would be to identify



DEPARTMENT OF DEFENSE
WASHINGTON HEADQUARTERS SERVICES
1155 DEFENSE PENTAGON
WASHINGTON, DC 20301-1155

RE&F-LFD-FCA

January 18, 2000

MEMORANDUM FOR CHIEF, SAFETY & OCCUPATIONAL HEALTH BRANCH

THRU DIRECTOR, LEASED FACILITIES DIVISION

SUBJECT: Request for additional IAQ Services on the 9th Floor of Skyline V

Request additional Indoor Air Quality (IAQ) services be performed on the 9th floor of Skyline V, 5111 Leesburg Pike, Falls Church, Virginia.

DISA has requested additional testing be conducted on the 9th floor of Skyline V in order to determine what the current level of contamination is, if any. DISA has specifically asked that testing be conducted not only in the areas that have experienced leaks but also several other areas that have not. FCA believes very much that this additional testing should be conducted and quickly.

Please contact Mrs. Tina America at (703) 681-7711 to coordinate access to the space. If you have any questions or require additional information please do not hesitate to call.

Thank you for your prompt attention to this matter.

(b) (6)

SAMUEL F. RYAN
DoD Area Manager
Falls Church Area

cc: Mr. Bob Clapp (DISA)
Ms. Helen Creel (DISA)
Mr. Scott Stern (DISA)
Mr. Carl Battenfeld (GSA)



Charles E. Smith Commercial Realty

Skyline Management Office
5201 Leesburg Pike, Suite 101
Falls Church, VA, 22041
(703) 284-7660 * FAX (703) 820-3978

January 13, 2000

Mr. Carl W. Battenfeld
Building Manager
General Services Administration
5203 Leesburg Pike, Ste. 1407
Falls Church, VA 22041

Re: Status of Water Penetration Repairs, Sky 5, 9th Floor, DISA

Dear Carl:

This letter is to provide you the status of window and roof repairs at the above referenced location.

- It has been decided to replace the entire section of roof on the south side of the above-referenced building. The contract has been executed and work will begin tomorrow. This project is anticipated to be completed in approximately four weeks.
- The windows identified to have been leaking on the courtyard side of the building did not leak during our last rain. Hopefully the caulking and roof repairs performed last week have corrected these areas.
- The caulking contractor is scheduled to repair the Director's soffit leak on Tuesday, January 18. Once this work is complete, a cleaner will be scheduled to remove the calcium deposits on the aluminum window bulkhead.
- We are awaiting results from the air and sample testing performed on Thursday, January 6. Once these results are received, we will plan our remediation work in conference room 9181 and adjacent offices.

Jan 20 00 12:03p Curtis Thomas, Jr. (703) 756-6289 P.5

Carl W. Battenfeld
January 13, 2000
Page 2

It is our intention to bring all water penetration issues under control. Thank you for your cooperation and patience.

Sincerely,
CHARLES E. SMITH COMMERCIAL REALTY

(b) (6)

Bonnie J. Muth
Building Director

cc: C. Gerardi

Charles E. Smith Commercial Realty

Skyline Management Office
5201 Leesburg Pike, Suite 101
Falls Church, VA 22041
(703) 284-7666 • FAX (703) 820-3978

January 6, 2000

Mr. David Polk
Property Manager
GSA
5203 Leesburg Pike, Ste. 1407
Falls Church, VA 22041

Re: DISA, 9th Floor, Skyline 5

Dear Dave,

This letter serves to provide you with the status of work being performed to correct water leaks and related damage in the above-referenced tenant suite.

- We have completed the roof replacement above the conference room #9181. No leakage has been detected since the replacement.
- We have performed remediation and exploratory work in the suite on Saturday, December 6. This work consisted of appropriately treating and removing materials that had positive sample results from the first testing. The major areas were the conference room #9181 and adjacent offices.
- On Wednesday evening, January 5, we surveyed all perimeter offices in the subject suite and identified offices that have evidence of prior water leakage. This office location list was reviewed with both our caulking and roofing contractors. Also during this evening we performed more remediation work, which again consisted of cleaning and removing possible materials that showed positive test results. We also performed additional exploratory work at that time.
- On Thursday, January 6, we performed extensive air and sample testing of the entire 9th floor suite. The test results will not be completed until several days. After receiving the results, we will be able to better plan our remediation work.

CRS with approx 2B
basin remediation on test
results & NOT where H2O damage
is evident
✓ to see if there is more H2O damage
✓ where they indicated repairs were made
✓ r there continued leaks
✓ has the damaged mats been removed
✓ are there any signs of mold growth

P.7

(703) 756-6289

Curtis Thomas, Jr.

Jan 20 00 12:04p



11800 Sunrise Valley Drive, Suite 1200
Reston, Virginia 20191
(703) 648-0822 Fax (703) 648-0575

Indoor Air Quality Survey Report

Delivery Order Number MDA946-00-D-0001 - Log Number 0028
Applied Environmental Reference Number 910-99-0633

December 17, 1999

Submitted to: DOD, WHS, RE & F/SEMD/SOHB
Room 2D333
Attn: Michael Langone, Chief, Safety & Occupational Health
Pentagon
Washington, D.C. 20301-1155

Introduction

Applied Environmental, Inc. conducted an Indoor Air Quality (IAQ) survey within a 9th floor conference room and adjacent offices in the Skyline 5 office building, located at 5111 Leesburg Pike, Falls Church, Virginia. The survey was performed on December 2 and 3, 1999, and consisted of direct-reading measurement of carbon monoxide (CO), carbon dioxide (CO₂), temperature, and relative humidity. These parameters were also logged continuously during a 24-hour period. Air flow measurements were conducted at each supply and return diffuser, and a diagram of the room was prepared in accordance with the scope of work. Air sampling for total bacteria and fungi was performed, and sampling for air and surface bacteria and fungi was also performed in several locations.

Industrial hygiene air testing was accomplished in accordance with procedures established by the American Industrial Hygiene Association (AIHA), The Occupational Safety and Health Administration (OSHA) the National Institutes for Occupational Safety and Health (NIOSH) and the American Conference of Governmental Industrial Hygienists (ACGIH), as well as current industry standards. An assessment of the collected data was also made in accordance with non-regulatory standards for IAQ developed by American Society of Heating, Refrigeration, and Air Conditioning Engineers, as appropriate.

An air quality profile was performed in 5 locations within the room. Sampling was also performed outdoors for comparison purposes. Reference levels, sampling methodologies and equipment specifications for the instruments used during the survey are attached to this report as Appendix A.

JAN 03 '00 11:47AM GSP/MCR/MPX

Executive Summary

As a result of the survey, the relative humidity measurements were found to be below the ASHRAE-recommended comfort range and below the less stringent range recommended in the OSHA Technical Manual in all sampling locations. Temperature, carbon monoxide and carbon dioxide concentrations were in acceptable ranges.

Good air flow was observed within the room. Black particulate was observed on return air grilles within the survey area.

Air and surface sampling indicated the presence of *Stachyotrys chartarum* in several of the sampling locations including the return air plenum. Continuing water incursion is reported into the space, and signs of the partial removal of wet and water-damaged building materials were evident.

Survey Results

The sampling locations and the results of the measurements collected during the survey are presented in the following data table. The data-logging information for the conference room is included as an attachment for your reference. The comparison criteria for each sampling parameter are presented in Appendix A.

Location	Time	Temp (°F)	Temp (°C)	CO ₂ (ppm)	CO (ppm)
Outside, Entrance to	9:50 a.m.	42.9	37.2	544	1
Parking Garage	3:30 p.m.	53.9	15.4	436	0
9 th Fl. Conference Room	10:39 a.m.	68.9	19.3	731	0
	2:50 p.m.	74.6	13.6	579	0
9 th Fl. Room 9182	10:39 a.m.	69.3	18.5	652	0
	2:55 p.m.	74.5	13.4	577	0
9 th Fl. Room 9113	11:15 a.m.	70.0	17.2	672	0
	2:58 p.m.	74.9	13.8	600	0
9 th Fl. Corridor at Entrance	11:17 a.m.	70.5	17.9	658	0
to Conference Room	3:02 p.m.	72.4	14.9	600	0
9 th Fl. Room 9112	11:20 a.m.	72.4	16.9	604	0
	3:06 p.m.	72.4	13.3	527	0

During the data-logging period in the conference room, the average carbon dioxide concentration measured 548 ppm. The average temperature was 69.9°F, with relative humidity averaging 17.6%. The maximum carbon monoxide concentration measured 1 ppm.

The relative humidity measurements were below the ASHRAE recommended comfort range and the range recommended in the OSHA Technical Manual in all sampling locations. Diminished relative humidity is not uncommon in the Washington, D.C. metropolitan area during the heating season. Temperature measurements were within the recommended range in all sampling locations.

Carbon dioxide measurements were below the recommended maximum guidelines in all sampling locations. Carbon monoxide measurements were well below regulatory limits and industry exposure guidelines in all sampling locations.

The laboratory results of the bacterial and fungal air and surface sampling are presented in the following table.

Sample Location	Sample Type	Result	Organisms Found
JADD991202 - 1 9 th FL Conference Room, on table	Bacteria, Air, ID 1	7 cfu/m ³	Bacillus species (100%)
JADD991202 - 1 9 th FL Conference Room, on table	Fungi, Air, ID 1	63 cfu/m ³	Stachybotrys chartarum (atra) (44%)
JADD991202 - 2 9 th FL Conference Room, in Return Air Plenum	Bacteria, Air, ID 1	21 cfu/m ³	Coagulase-negative Staphylococcus (67%)
JADD991202 - 2 9 th FL Conference Room, in Return Air Plenum	Fungi, Air, ID 1	150 cfu/m ³	Stachybotrys chartarum (atra) (71%)
JADD991202 - 3 9 th FL Room 9182	Bacteria, Air, ID 1	14 cfu/m ³	Coagulase-negative Staphylococcus (50%)
JADD991202 - 3 9 th FL Room 9182	Fungi, Air, ID 1	56 cfu/m ³	Stachybotrys chartarum (atra) (13%)
JADD991202 - 4 9 th FL Room 9112	Bacteria, Air, ID 1	77 cfu/m ³	Micrococcus species (45%)
JADD991202 - 4 9 th FL Room 9112	Fungi, Air, ID 1	56 cfu/m ³	Penicillium species (38%)
JADD991202 - 5 Outside	Bacteria, Air, ID 1	35 cfu/m ³	Coagulase-negative Staphylococcus (60%)
JADD991202 - 5 Outside	Fungi, Air, ID 1	290 cfu/m ³	Cladosporium species (64%)
JADD991129 - 6 Blank	Bacteria, Air, ID 1 Fungi, Air, ID 1	No Growth	
JADD991202 - 7 9 th FL Conference Room, Window Ledge	Bacteria, Wipe, ID 1	20 cfu/in ²	Bacillus species (100%)
JADD991129 - 7 9 th FL Conference Room, Window Ledge	Fungi, Wipe, ID 1	No Growth	
JADD991202 - 8 9 th FL Conference Room, Top of Light Fixture	Bacteria, Wipe, ID 1	Unable to quantitate due to heavy fungal growth	Bacillus species (85%)
JADD991129 - 8 9 th FL Conference Room, Top of Light Fixture	Fungi, Wipe, ID 1	420 cfu/in ²	Penicillium species (51%)
JADD991202 - 9 9 th FL Conference Room, Top of Gypsum Ceiling Tile	Bacteria, Wipe, ID 1	Confluent Growth, Unable to quantitate	Bacillus species (98%)
JADD991129 - 9 9 th FL Conference Room, Top of Gypsum Ceiling Tile	Fungi, Wipe, ID 1	140 cfu/in ²	Stachybotrys chartarum (atra) (35%)

JADD991202 - 10 9 th Fl. Room 9182, Window Ledge, Center	Bacteria, Wipe, ID1	5 cfu/in ²	Bacillus species (100%)
JADD991202 - 10 9 th Fl. Room 9182, Window Ledge, Center	Fungi, Wipe, ID 1	15 cfu/in ²	Stachybotrys chartarum (atra) (93%)
JADD991202 - 11 9 th Fl. Room 9112, Window Ledge, Mud Spot	Bacteria, Wipe, ID1	No Growth	
JADD991202 - 11 9 th Fl. Room 9112, Window Ledge, Mud Spot	Fungi, Wipe, ID 1	No Growth	
JADD991202 - 12 Blank	Bacteria, Wipe, ID 1 Fungi, Wipe, ID 1	No Growth	

22/23

The presence of *Stachybotrys chartarum* in the air samples collected indicates that water incursion into the space has been prolonged, and that conditions for amplification are likely to be present. The presence of spores on several surfaces throughout the area including the return air plenum indicates that dissemination of the *Stachybotrys* organisms is likely to be extensive, and is likely to have been caused by airflow dynamics within the space as well as through physical disturbance during the removal of water damaged building materials.

Identification of *Stachybotrys chartarum* can occur when organic building materials become wet and stay wet for extended periods of time. The fact that this fungus was identified in the wipe samples and in the air is cause for concern, because the airborne fungus can result in exposures when inhaled by the building occupants.

Stachybotrys chartarum is most commonly grows on damp cellulose, and is found in high concentrations in agricultural products such as hay or straw. In indoor environments, it is found in areas with severe water leaks, and grows readily on the paper backing component of gypsum wallboard in wall cavities and in other environments where conditions for growth are suitable. *Stachybotrys chartarum* has been recently implicated in an outbreak of pulmonary hemorrhage in infants in the Cleveland area in flooded homes. *Stachybotrys chartarum* produces strong mycotoxins (toxic byproducts given off during growth). These mycotoxins has been loosely associated with adverse health effects including contact irritation that can lead to mucous membrane irritation including sore throat and irritation of the conjunctiva around the eye, cough, rhinitis, burning sensations in the mouth, throat, and nasal passages, and cutaneous (skin) irritation at the points of toxin contact. Nosebleeds are also common, and tracheal bleeding has been occasionally reported.

Stachybotrys is relatively difficult to isolate in air samples using regular nutrient media as was used in this survey. As a result, the number of airborne spores which did not result in viable colonies (and were not counted in the results) was most likely higher than the sampling results indicate. This is significant as non-viable spores can be as irritating as viable spores.

The laboratory data sheets are attached for your reference.

Recommendations

Based upon the sampling results and upon observations made while on-site, the following recommendations are provided:

1. The presence of *Stachybotrys chartarum* within the wipe samples and air samples collected indicates the presence of excessive moisture in the building. It is imperative that the source of water incursion be identified, and the water prevented from entering the building envelope. An assessment must also be performed to identify the extent and locations of contamination of building materials with *Stachybotrys chartarum*. Porous building materials that are or have been wet should be removed and discarded, and non-porous materials should be thoroughly cleaned and disinfected. It is strongly recommended that the assessment and any remedial activities be performed in such a manner as to avoid further dissemination of the *Stachybotrys chartarum* organisms identified during the sampling. roof & ceiling leaks
2. Strong consideration should be given to performing assessment and remedial activities during off-hours or at a time when the affected areas are unoccupied to minimize the potential for building occupants to be exposed to *Stachybotrys chartarum*. Applied Environmental, Inc., will provide any technical assistance you require in performing an appropriate assessment of the building, and can provide further information, a remediation work plan, and a list of recommended contractors experienced in remediating *Stachybotrys* contamination in commercial office buildings.
3. Humidity control may be desirable through the use of portable humidifiers if occupant discomfort is severe. If used, caution must be exercised in the maintenance, cleaning, and disinfection of the units since they are frequently sources of microbial bioamplification indoors.



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ATTACHMENT A

COMPARISON CRITERIA FOR INDOOR AIR QUALITY PARAMETERS

Carbon Dioxide

Carbon dioxide (CO₂), a product of combustion and human respiration, is a commonly used indicator of overall air quality and ventilation rates within an occupied building. The levels found in buildings are primarily a function of the rate and amount of outside air delivery to the occupied space, the effectiveness of air distribution within the space, and the occupancy (number of people and activity) of the space. It is generally accepted that an inadequate outside air supply may cause problems such as headaches and respiratory difficulties, due to a general build-up of non-specific contaminants and odors. These symptoms are typically categorized as "Sick Building Syndrome."

ASHRAE has published a recommended guideline of 1,000 ppm of CO₂ as the maximum limit for acceptable air quality in the document, *ASHRAE 62-1989, Ventilation for Acceptable Air Quality*. According to the American Society for Testing and Materials' (ASTM) *Provisional Standard Guide for Using Indoor Carbon Dioxide Concentrations to Evaluate Indoor Air Quality and Ventilation*, (PS 40-93), the 1,000 ppm guideline is based upon an indoor to outdoor differential of 650 ppm and assumes an outdoor CO₂ concentration of 350 ppm. At a differential higher than 650 ppm, 80% of unadapted individuals (visitors) would find air quality unacceptable (based upon non-specific contaminants, such as body odor and other bioeffluents).

According to the *OSHA Technical Manual, Chapter 6 - Indoor Air Quality Investigation* (a non-regulatory guidance document issued by OSHA Instruction CPL-2-2.20B, CH-1, November 13, 1990, for OSHA personnel conducting field surveys), NIOSH has published the following guidelines for indoor levels in the document, *Guidance for Indoor Air Quality Investigations, 1987*:

- | | |
|------------------|--|
| • 250-350 ppm | Normal Ambient Outdoor Concentrations |
| • 600 ppm | Minimal Air Quality Complaints |
| • 600 - 1000 ppm | Less Clearly Interpreted |
| • 1,000 ppm | Indicates inadequate ventilation and complaints such as Headaches, fatigue, and eye and throat irritation will be more widespread; 1000 ppm should be used as an upper limit for indoor levels |

These levels are only guidelines. If carbon dioxide levels exceed 1000 ppm it does not necessarily indicate that the building is hazardous and should be evacuated. Rather this level should be used as a guideline that helps maximize comfort for all occupants."

Carbon Monoxide

Carbon monoxide is a colorless, odorless, and tasteless gas that is formed during the combustion of hydrocarbon fuels. It is often introduced into buildings from outdoor sources (loading docks, vehicles) by way of the ventilation system, or from indoor sources (fireplaces and improperly vented combustion appliances). Carbon monoxide is a chemical asphyxiant to humans; when inhaled it combines with the hemoglobin of the blood to form carboxyhemoglobin (COHb), inhibiting oxygen transportation to the brain, heart, and other body parts. Prolonged exposure to CO can cause hypoxic stress in healthy individuals, and severe heart, brain, and circulatory damage, or death with sufficient exposure.

The diagnosis of carbon monoxide intoxication depends primarily on the demonstration of significantly increased COHb in the blood. While the reaction to a given blood level is extremely variable, levels over 60% are usually fatal; 40% is associated with collapse and syncope; between 15 and 25% there may be headache and nausea. The blood levels of cigarette smokers contain 3 to 10% COHb (with an average of 5.9% if a pack a day is smoked). By comparison, unexposed individuals have an average level of 1% COHb.

The current OSHA Permissible Exposure Limit (PEL) for carbon monoxide is 50 ppm for an eight-hour Time Weighted Average (TWA). OSHA has proposed a revised TWA exposure limit of 35 ppm and a ceiling level of 200 ppm, with an Immediately Dangerous to Life and Health (IDLH) level of 1,500 ppm.

The ASHRAE guideline for CO is 9 ppm as an eight-hour time weighted average, or 35 ppm as a one-hour average, according to ASHRAE 62-1989.

Temperature and Relative Humidity

The standard *ASHRAE 55-1981, Thermal Environmental Conditions for Human Occupancy*, recommends that indoor temperatures be maintained between 74°F and 79°F during the summer/transitional season and between 68°F and 76°F during the winter/transitional season, with relative humidity between 30% and 60%. These values are considered acceptable ranges of operative temperature and humidity for persons wearing typical light clothing and engaged in light activity, such in a typical office setting. The standard is considered to have been met if 80% of the building occupants are satisfied.

The ideal comfortable relative humidity range has been reported by ASHRAE to be 40% to 60%, as long as building materials or contents are not adversely affected. OSHA recommends humidity control within a 20% to 60% range in their technical manual for indoor air quality investigations. Low relative humidity can result in eye irritation and complaints of nose and throat discomfort in some individuals. In addition, irritated mucous membranes can predispose susceptible individuals to the affects of certain chemical and microbiological air contaminants. Sustained high humidity levels (over 70%) can promote the growth of microorganisms on building surfaces and furnishings and cause or contribute to microbial IAQ problems.

The Washington, D.C. metropolitan area commonly experiences hot summers with high humidity, and cold winters with very low humidity. Excessive humidity is typically controlled indoors by the air-conditioning system, and is generally within the referenced comfort ranges during the cooling season. Low indoor humidity levels in the winter are caused by drawing low-humidity outdoor air into the HVAC system, and heating it to the desired comfort level. This heating process drives moisture out of the conditioned air, commonly resulting in depressed humidity levels indoors during the heating season.

Target operating temperatures in commercial buildings in the Washington, D.C. metropolitan area are from 71°F to 73°F, with indoor relative humidity levels ranging from approximately 35% to 55% during the cooling season and from 20% to 40% during the heating season.

Microbial - General Guidelines

Microorganisms and other biological contaminants have been associated with various allergic responses including asthma attacks, hypersensitivity responses (hypersensitivity pneumonitis, humidifier fever, allergic rhinitis etc.) and illnesses such as legionellosis, Legionnaire's disease, and Pontiac Fever. Symptoms can include chills, fever, muscle aches, chest tightness, headache, cough, sore throat, diarrhea, and nausea. Sources of microbial contaminants can include air handling system condensate, cooling towers, water-damaged building materials, high indoor humidity, damp organic materials, and porous wet surfaces. The presence of moisture or water in combination with organic materials (e.g., building materials and dust or soil) can support the growth of microorganisms such as bacteria or fungi. Microbial contamination within a building ventilation system is also of concern due to the potential for the system to circulate microorganisms to non-source areas (e.g., areas without water damage or reservoirs).

The ACGIH *Bioaerosols, Assessment and Control* provides guidance on investigation, sampling, assessment, and remedial actions. This document identifies microorganisms currently associated with Building Related Illness (BRI), but does not provide any criteria for acceptable airborne concentrations or surface contamination levels. Emphasis is placed on identification of species, conditions found at the site, and symptoms reported by the affected individuals. "ACGIH does not support any existing numerical criteria for interpreting data on biological agents from source or air samples in non-manufacturing environments."

There are no federal OSHA standards regulating exposure to microorganisms in the work place. The OSHA *Technical Manual, Chapter 6 - Indoor Air Quality Investigation, issued by OSHA Instruction CPL-2-2.20B, CH-1, November 13, 1990*, provides a value of 1,000 viable Colony Forming Units per cubic meter of air (CFU/M³), 1,000,000 CFU/gram of fungi in dust or material, and 10,000 CFU/milliliter of stagnant water or slime as contamination indicators.

No contamination indicator is provided for surface or wipe sampling concentrations. Wipe sampling is commonly performed to evaluate the degree of surface contamination. Although the analysis can be reported as a concentration referencing quantity per area, the result is generally considered an empirical or qualitative value. An affirmative outcome is simply an indicator that maintenance may be required to maintain surface cleanliness. There is no regulatory threshold for microbial wipe samples. Therefore, specific values should take into account sound professional judgment and recommended guidelines of research and public health institutions when evaluating the significance of the analytical results. Careful consideration should also be given when assessing the magnitude of the value, keeping in mind comparative outdoor species, contaminant dispersion, and the toxicity of the microorganism isolated.

It should be noted that levels in excess of these concentrations do not necessarily imply that the conditions are unsafe or hazardous. A determination of the types and concentrations of airborne microorganisms is necessary to fully evaluate the hazard to employees. However, as previously indicated, this level does not correlate directly with airborne levels that are of health concern because of the wide variety of microorganisms that can be found in buildings. In several cases where a large number of people have exhibited illnesses that were associated with microbial exposure, the levels of bacteria and fungi have usually been more than 2,000 CFU/M³ of air. It should be noted that during growing seasons, outdoor fungal spore levels can range from 1,000 CFU/M³ to 100,000 CFU/M³ of air.

Adverse health effects associated with exposure to microbial organisms are a function of many factors, of which concentration and the type of organism, are major considerations. In most cases where the airborne concentration of viable microbes is low, adverse health consequences of exposure to bioaerosols are observed only in hypersensitive individuals, such as persons with known allergy histories, or in individuals with compromised immune systems. When present, the reactions of such individuals tend to

become more severe with increasing exposure in terms of the concentration of the microbial contaminant and/or the duration of exposure.

In assessing potential microbial exposures, it is important to note that individual microbial measurements provide a limited view of true exposure due to the fact that levels can fluctuate widely over time and under varying conditions. In addition, generally available microbial monitoring procedures measure viable organisms only. Dead cells and cell fragments, proteins, metabolites and volatile organic compounds produced by microbes, may also be responsible for adverse health effects.

Confirmation of actual health effects resulting from exposure to a microbial agent, in such cases as BRI or Legionnaires' disease, must be based on medical findings in conjunction with survey test results.

Direct Reading Measurements

The CO₂ measurements were made with a portable CO₂ indicator manufactured by Metrosonics, Inc. For this unit, the principle of operation for CO₂ measurements is non-dispersive infrared spectrophotometry. The unit has an accuracy tolerance within $\pm 3\%$ of full scale (5,000 parts per million (ppm) at 25°C) and a resolution limit of 1 ppm. It is capable of providing real-time CO₂ concentration with a range of operation from 0 to 5,000 ppm. The Metrosonics unit also measures ambient temperature with a usable range of 32°F to 140°F with an accuracy of $\pm 0.9^\circ\text{F}$. Ambient relative humidity is measured from 0% to 100% relative humidity with an accuracy of $\pm 3\%$ at 25°C.

The CO measurements are made with a selective electrochemical CO sensor installed into the Metrosonics unit. The CO sensor has an accuracy (at 25°C) of better than $\pm 3\%$ of reading or ± 2 ppm (whichever is greater). The unit is capable of providing real-time CO concentrations during the sampling period with a range of operation of 0 to 1,000 ppm.

Respirable particulate measurements are made with a Handheld Aerosol Monitor manufactured by ppm, Inc. The operation of this direct-reading instrument is based on the scattering of light (photometry), which is subsequently related to mass concentration. The unit will measure particles between 0.02 and 20 micrometers. Its highest sensitivity is between approximately 0.1 and 10 micrometers. Concentrations from 0.001 to 200 milligrams per cubic Meter (mg/M³) can be measured. Measurements are converted to micrograms per cubic meter ($\mu\text{g}/\text{M}^3$) for comparison to industry guidelines.

Ventilation measurements were made at accessible components using a factory calibrated Alnor Balometer, Model 6463 and a Velometer, Series 6000, in accordance with standard industrial hygiene/engineering protocols. The Balometer can measure volumetric airflow from 0 CFM to 2000 CFM, with an accuracy of $\pm 3\%$ of full scale, except above 1,300 CFM on exhaust flow from base to hood, which is $\pm 4\%$ of full scale. The unit read-out time is approximately 4 seconds, and it has an operable temperature range from 32-122°F. The unit can measure standard diffuser openings of 2'x 2', 2'x 4' and 1'x 4'. The Velometer can measure air velocities inside heating and ventilating ducts, or in open areas such as fume hoods, grilles, diffusers, slots on ventilated plating tanks, etc. The Velometer can measure air velocity in feet/minute from 0 FPM to 10,000 FPM, with an accuracy of $\pm 2\%$ of full scale. The unit can measure static pressure from 0 to 3.0 inches of water (0 to 75 mm), with an accuracy of $\pm 5\%$ of full scale. The unit is operable to 250°F. Air velocities may be calculated to volumetric measurements by multiplying the velocity measurement by a manufacturer's constant for each type of diffuser.

The criteria used to evaluate the survey results include standards and guidelines referenced by the Occupational Safety and Health Administration (OSHA), the American Society for Heating, Refrigerating, and Air-Conditioning Engineers, Inc. (ASHRAE), the American Conference of

Governmental Industrial Hygienists (ACGIH), the U.S. Environmental Protection Agency (EPA), the National Institute for Occupational Safety and Health (NIOSH), and other applicable industry guidelines.

Microbial Air and Surface Sampling

Microbial air samples are collected using a single-stage Andersen viable sieve impactor with the N6 stage. Air is drawn through the impactor using a precalibrated GAST electric high-volume sampling pump at a rate of 28.3 liters per minute. Trypticase soy agar media is used for bacterial samples and modified malt extract agar for fungal samples. Analyses of the microbial air samples were performed in accordance with standard medical/public health microbiological isolation and characterization techniques and NIOSH Method 501 (draft document). The samples were analyzed to identify the concentrations of viable bacterial and fungal organisms present in total Colony Forming Units per cubic Meter of air (CFU/M³).

The wipe samples are collected using *Culturette II* rayon-tipped sampling swabs and transport systems manufactured by Becton Dickinson Microbiology Systems. Each swab is used to wipe a known area of the surface to be sampled, and is then stored in a modified Stuart's bacterial transport medium during handling and transport to the laboratory. All samples were collected in accordance with protocols recognized by the American Conference of Governmental Industrial Hygienists (ACGIH), and were enumerated and identified using standard isolation and identification techniques. Sample results are provided as total counts of colony forming units (CFUs) per square inch of surface area for the wipe sample.

Microbial samples were analyzed by the Aerobiology Laboratory Division of Applied Environmental, Inc.